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HYDROLOGIC DATA FOR EXPERIMENTAL AGRICULTURAL WATERSHEDS IN THE UNITED STATES, 1970

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UNITED STATES
DEPARTMENT OF
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MISCELLANEOUS
PUBLICATION
NUMBER 1380

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SCIENCE AND
EDUCATION
ADMINISTRATION

ABSTRACT

Burford, James B., Jane L. DeLashmutt, and Ralph T. Roberts, 1980. Hydrologic data for experimental agricultural watersheds in the United States, 1970. U.S. Department of Agriculture, Miscellaneous Publication No. 1380, 515 pp.

Hydrologic data from 153 agricultural watersheds for calendar year 1970 are summarized in this publication. Daily and monthly total precipitation and streamflow together with annual maximum peak discharge and maximum runoff for selected time intervals are included. Watershed descriptive information is presented. Maximum and minimum daily temperatures are given for many of the watersheds. This is the 14th publication in this series.

KEYWORDS: Air temperature, hydrology data, hydrology research, precipitation, streamflow, water data, watersheds.

Science and Education Administration
U.S. DEPARTMENT OF AGRICULTURE
In Cooperation With
State Agricultural Experiment Stations

HYDROLOGIC DATA FOR EXPERIMENTAL AGRICULTURAL WATERSHEDS IN THE UNITED STATES, 1970

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PREFACE

This publication presents basic data on monthly precipitation and runoff; annual maximum discharge and maximum volumes of runoff; daily precipitation and mean daily discharge, with daily air temperature for some areas; and selected runoff events, with associated data on rainfall, land use, and antecedent conditions for agricultural watersheds where research was in progress during 1970. It is a continuation of processing and releasing hydrologic data of general interest collected cooperatively with other agencies.

Throughout the watershed studies the State agricultural experiment stations have collaborated in selecting, planning, and conducting these studies. In several studies the U.S. Geological Survey and State and local agencies, such as State water boards and highway departments of local drainage and conservation districts, have assisted in the work. The classification and correlation of soils and evaluation of other watershed characteristics in the descriptions have been based mostly on field surveys by the U.S. Department of Agriculture's Soil Conservation Service.

These data were collected originally for specific research objectives, which are still in progress or have been attained. In addition, they can serve many other purposes. This publication provides information for other government agencies, university staff members, graduate students, private engineers, and those who need detailed, factual information concerning agricultural watersheds. High-quality hydrologic data such as these have historic value in addition to providing a basis for research and design and evaluation of projects and programs for conservation and development of the Nation's water resources.

Although the data on which this publication is based were collected in 1970, the findings are still valid and are used for further research on agricultural watersheds.

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The decimal system of paging is used to index the watershed data. Pages are numbered at the bottom according to location and watershed number, and the data for each watershed are given on one or more pages. For example, page 10.001-1 is location 10 (Watkinsville, Ga.), Watershed 1 (W-1 at Watkinsville), and page 1 of the data for that watershed. For convenience in finding items listed in table 3, pages are also numbered consecutively at the top.

Table 3 is a list of continuing or new watersheds by State, locality, assigned location number, and land resource area, with number of watershed units and selected runoff events reported for 1970 in this publication. Table 4 includes similar data on discontinued watersheds.

Issued January 1980

Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1970

This is the 14th publication in the series on hydrological data by the Science and Education Administration - Agricultural Research (SEA-AR) (formerly Agricultural Research Service (ARS)). The first three are described in the following section and the others are summarized in table 1. Since the decimal paging system used (see explanation on preceding page) is consistent with that at the bottom of pages in the other 13 publications, previously published records and general descriptions can be readily found and consulted.

This publication contains selected hydrologic data from 153 watersheds for 1970. It includes data on monthly precipitation and runoff for all the watersheds; annual maximum discharge and maximum volumes of runoff for intervals of 1, 2, 6, and 12 hours and 1, 2, and 8 days for 139 watersheds; daily precipitation for 150 watersheds; mean daily discharge for 130 watersheds; daily maximum and minimum air temperatures for 16 watersheds; and detailed information on 1 or more selected typical storm events for 113 watersheds.

Information on selected storm events includes (1) tabular data for antecedent rainfall and runoff; (2) data on rainfall intensity and runoff for the event and on accumulated depth of rainfall and runoff; (3) description of watershed conditions at the time of the selected events; and (4) plottings of runoff hydrographs and rainfall histograms.

For newly established watersheds, descriptions of watershed physical characteristics, instrumentation, land management, and recommended area of application of the results are given as well as graphs and maps.

The first 11 publications in this series resulted from the cooperative efforts of several former ARS watershed research projects and the editing staff in Beltsville, Md. Hydrologic data were summarized, arranged according to standardized formats, recorded on preprinted data sheets, and submitted to the editing office for final review, assemblage, and publication.

A computer-oriented system has been designed and developed by the Water Data Laboratory to produce camera copy sheets for these publications. This is the third publication that has been compiled using the computerized system. Hydrologic data submitted from research projects, in digital form and recorded by computer, are accepted by the system. The required data analyses and summaries are performed and the tables and plottings are provided within and by the system. Narrative information is incorporated into the system as upper and lower case alphanumeric data using computer-compatible word-processing equipment. The format of hand-compiled references (4-11) has been retained where practicable in the computer-compiled versions of the publications.

PUBLICATIONS OF EARLIER DATA

Historical hydrologic data on the experimental agricultural watersheds, both terminated and active, have been previously summarized in three looseleaf publications (reprints in bound volumes) by the former Agricultural Research Service. They are described in the following three reference summaries. Beginning with the hydrologic data for 1956 through 1970, the types of data previously published separately in these three references are combined in U.S. Department of Agriculture Miscellaneous Publications 945, 994, 1070, 1164, 1194, 1216, 1226, 1262, 1330, 1370, and 1380. These 11 publications are listed in table 1 as references 4-14. These reference numbers have been assigned to simplify citations to them in this and future publications. The first three looseleaf and the first eight miscellaneous publications have been recorded on 16-mm microfilm. Copies can be made available for the cost of the film processing.

Reference 1,--"Monthly Precipitation and Runoff for Small Agricultural Watersheds in the United States," Soil and Water Conservation Research Branch, 691 pages, 1957. Includes physical descriptions and land use of 334 experimental agricultural watersheds at 60 locations in 27 States from 1923 through 1957. Many of these watersheds were discontinued before 1955.

Reference 2,--"Annual Maximum Flows From Small Agricultural Watersheds in the United States," Soil and Water Conservation Research Division, 330 pages, 1958. Includes records from 322 watersheds at 59 locations in 27 States from 1923 through 1957. Many of these watersheds were discontinued before 1957.

Reference 3,--"Selected Runoff Events for Small Agricultural Watersheds in the United States," Soil and Water Conservation Research Division, 374 pages, 1960. Includes a sam-

pling of 1 to 6 typical runoff events from 68 watersheds at 40 locations in 25 States from 1933 through 1959. The publication has maps of each watershed, information on watershed conditions for each event, including the 30-day antecedent rainfall and runoff, and tabular as well as graphic data on each storm.

Copies of all these publications have been furnished to the Soil Conservation Service and other Federal, State, and local government agencies. They have also been distributed to State agricultural experiment stations, university libraries and engineering departments, private engineers and individuals when requested, and similar foreign institutions and individuals when requested.

Table 2 lists in which of the 14 references data are included for each watershed.

Table 3 summarizes where data for each watershed can be found in this 14th publication.

Table 4 lists the watershed units where studies were discontinued in 1969.

FORM OF DATA PRESENTATION

The data in this publication are presented for each watershed in the following order: (1) Watershed description, if not previously published; (2) monthly precipitation and runoff; (3) average monthly precipitation and runoff for period of record; (4) annual maximum flows; (5) daily temperature extremes, daily precipitation, and discharge for some watersheds; (6) selected runoff events; (7) graphs of selected runoff events; and (8) watershed maps, if not previously published or if revised.

Continuing Watersheds

For current watersheds for which the descriptive information has been

Table 1,---Description of references 4-14 of "Hydrologic Data for Experimental Agricultural Watersheds in the United States"

Reference	For calendar year (19--)	Miscellaneous Publication No.	Year published (19--)	Total pages	Number of watersheds for which indicated data are given			
					Monthly precipitation and runoff	Annual maximum discharge and runoff for selected time intervals	Selected runoff events	New water-sheds
								Daily precipitation, discharge, and/or temperature (max.,-min.)
4,....	56-59	945	63	672	157	142	134	45
5,....	60-61	994	65	496	160	145	133	24
6,....	62	1070	68	447	164	155	136	13
7,....	63	1164	70	465	168	156	142	9
8,....	64	1194	71	460	163	163	143	8
9,....	65	1216	72	568	189	178	122	22
10,....	66	1226	72	399	198	185	106	11
11,....	67	1262	73	634	216	204	174	26
12,....	68	1330	76	542	174	174	116	1
13,....	69	1370	79	602	167	150	139	5
14,....	70	1380	79	515	153	139	113	2

Table 2.--Index to information on experimental agricultural watersheds included in references 1-141/

Water-shed ident. code	Study location		Water-shed name-No.	Area in acres 2/	Record (19--) R F 3/		Rev. ref. No. 4/	Index to information in reference 2/--													
	Town	State			01	02		03	04	05	06	07	08	09	10	11	12	13	14		
01001	Arnot Forest	NY	W-1	17.9	41	47		01	02												
01002	Arnot Forest	NY	W-4	17.9	41	47		01	02												
02002	Cohocton	NY	W-II	13.8	38	45		01	02	03											
02003	Cohocton	NY	W-III	24.2	38	45		01	02	03											
04001	Freehold	NJ	W-I	17.5	38	43		01	02	03											
04002	Freehold	NJ	W-II	32.9	38	55		01	02	03											
04003	Freehold	NJ	W-III	51.8	38	43		01	02												
05001	College Park	MD	W-1	8.22	39	54		01	02	03											
05002	College Park	MD	W-2	7.44	39	54		01	02	03											
05003	College Park	MD	W-3	5.02	39	55		01	02												
05004	College Park	MD	W-4	5.03	39	55		01	02												
05005	College Park	MD	W-5	4.07	39	54		01	02												
05006	College Park	MD	W-6	3.53	40	62	06	01	02	03	04	05	06								
05007	College Park	MD	W-7	3.52	40	62	06	01	02	03	04	05	06								
05008	College Park	MD	W-8	2.43	40	55		01	02	03											
05009	College Park	MD	W-9	12.05	40	55		01	02	03											
05010	College Park	MD	W-10	3.04	43	54		01	02												
06001	Hagerstown	MD	W-I	46.3	38	47		01	02												
06002	Hagerstown	MD	W-II	80.8	38	47		01	02	03											
07001	Auburn	AL	W-I	27.0	45	47		01	02												
08001	Vero Beach	FL	W-1	49,915.	51	73	06	01	02	03	04	05	06	07	08	09	10	11			
08002	Vero Beach	FL	W-2	63,170.	55		06	01	02		04	05	06	07	08	09	10	11	13	14	
08003	Vero Beach	FL	W-3	10,050.	55		06	01	02		04	05	06	07	08	09	10	11	13	14	
08004	Vero Beach	FL	W-4	3,968.	59	73							06	07	08	09	10	11			
09001	Americus	GA	W-I	22.8	38	43		01	02												
09002	Americus	GA	W-II	42.8	38	42		01	02												
09003	Americus	GA	W-III	32.0	38	42		01	02												
09004	Americus	GA	W-IV	59.2	38	43		01	02	03											
10001	Watkinsville	GA	W-1	19.2	39		07	01	02		04	05	06	07	08			12	13	14	
11001	High Point	NC	W.F.D.R.	21,100.	23	53		01	02	03	04										
11002	High Point	NC	M.C.	10,300.	34	41		01	02		04										
11003	High Point	NC	U.R.	7,230.	34	41		01	02		04										
12001	Statesville	NC	C-8	5.12	33	38		01	02												
12002	Statesville	NC	W-23	6.00	33	38		01	02												
13001	Blacksburg	VA	W-II	5.44	39	51		01	02												
13002	Blacksburg	VA	W-III	19.3	39	67		01	02	03	04	05	06	07	08	09	10	11			
13003	Blacksburg	VA	W-IV	3.49	51	67		01	02		04	05	06	07	08	09	10	11			
13004	Blacksburg	VA	W-V	6.08	52	67		01	02		04	05	06	07	08	09	10	11			
13005	Blacksburg	VA	W-VI	7.70	51	67		01	02		04	05	06	07	08	09	10	11			
13006	Blacksburg	VA	T.C.	3,054.	57	69					04	05	06	07	08	09	10	11	12		
13007	Blacksburg	VA	C.C.	786.	57						05	06	07	08	09	10	11	12	13	14	
13008	Blacksburg	VA	B.C.	893.	57		08				04	05	06	07	08	09	10	11	12	13	14
13009	Blacksburg	VA	P.C.	182.	58	69	08				05	06	07	08	09	10	11	12			
13010	Blacksburg	VA	L.W.C.	1,471.	58	74	08				05	06	07	08	09	10	11	12	13	14	
13011	Blacksburg	VA	R.R.B.	555.	58		08				05	06	07	08	09	10	11	12	13	14	
13012	Blacksburg	VA	P.M.B.	192.	58	69	08				05	06	07	08	09	10	11	12			
13013	Blacksburg	VA	C.R.	2,023.	59	69	10				05	06	07	08	09	10	11	12			
13014	Blacksburg	VA	F.C.	389.	60	69	08				05	06	07	08	09	10	11	12			
13015	Blacksburg	VA	C.B.	1,058.	60		08				05	06	07	08	09	10	11	12	13	14	
14001	Chatham	VA	W-I	13.3	38	48		01	02												
14002	Chatham	VA	W-II	16.1	38	48		01	02												
14003	Chatham	VA	W-III	17.1	38	48		01	02	03											

See footnotes at end of table.

Table 2.--Index to information on experimental agricultural watersheds included in references 1-141/--
Continued

Water- shed ident. code	Study location		Water- shed name-No.	Area in acres	Record (19--)		Rev. ref. No.	Index to information in reference 2/--													
	Town	State			R	E		01	02	03	04	05	06	07	08	09	10	11	12	13	14
15001	Staunton	VA	W-I	390.	48	55		01	02	03											
15002	Staunton	VA	W-II	2,430.	48	55		01	02												
15003	Staunton	VA	W-III	6,144.	48	55		01	02		04										
16006	Klingerstown	PA	WE-38	1,773.	68														12	13	14
17001	Edwardsville	IL	W-1	27.22	38	55		01	02	03											
17002	Edwardsville	IL	W-2	49.95	38	55		01	02												
17003	Edwardsville	IL	W-3	12.55	38	42		01	02												
17004	Edwardsville	IL	W-4	289.8	38	55		01	02	03											
18001	Elmwood	IL	WB-1	1.28	45	46		01													
18002	Elmwood	IL	WB-2	2.28	45	46		01													
18003	Elmwood	IL	WB-3	2.61	45	46		01													
18004	Elmwood	IL	WB-4	2.77	45	46		01													
18005	Elmwood	IL	WB-5	1.93	45	46		01													
18006	Elmwood	IL	WB-6	2.41	45	46		01													
18007	Elmwood	IL	WT-1	2.02	45	46		01													
18008	Elmwood	IL	WT-2	1.88	45	46		01													
18009	Elmwood	IL	WT-3	2.40	45	46		01													
18010	Elmwood	IL	WT-4	2.06	45	46		01													
18011	Elmwood	IL	WT-5	2.76	45	46		01													
18012	Elmwood	IL	WT-6	5.35	45	46		01													
19001	Lafayette	IN	W-1	2.55	40	53		01	02												
19002	Lafayette	IN	W-2	2.23	40	53		01	02												
19003	Lafayette	IN	W-4	2.01	40	53		01	02												
19004	Lafayette	IN	W-5	2.87	40	53		01	02	03											
19005	Lafayette	IN	W-6	2.79	40	53		01	02	03											
19006	Lafayette	IN	W-7	1.96	40	53		01	02												
19007	Lafayette	IN	W-8	1.96	40	53		01	02												
19008	Lafayette	IN	W-10	2.06	40	53		01	02												
19009	Lafayette	IN	W-11	2.05	40	53		01	02												
19010	Lafayette	IN	W-12	3.37	40	53		01	02												
19011	Lafayette	IN	W-13	3.02	40	53		01	02												
19012	Lafayette	IN	W-14	2.85	40	53		01	02												
19013	Lafayette	IN	W-15	3.59	40	53		01	02												
19014	Lafayette	IN	W-18	3.24	40	53		01	02												
19015	Lafayette	IN	W-20	2.64	40	52		01	02												
19016	Lafayette	IN	W-25	3.52	40	52		01	02												
19017	Lafayette	IN	W-31	1.64	40	51		01	02												
19018	Lafayette	IN	W-32	1.83	40	51		01	02												
19019	Lafayette	IN	W-33	3.44	40	51		01	02												
19020	Lafayette	IN	W-34	3.17	40	51		01	02												
20001	Clarinda	IA	W-V	3.25	32	42		01	02												
20002	Clarinda	IA	W-W	1.97	34	42		01	02												
20003	Clarinda	IA	W-X	1.97	34	42		01	02												
20004	Clarinda	IA	W-Y	3.25	32	42		01	02												
20005	Clarinda	IA	W-Z	3.12	32	42		01	02												
21001	Iowa City	IA		1,926.	24		07	01	02	03	04	05	06	07	08	09	10	11	12		
22001	Shenandoah	IA	No. 1	128,000.	34	40		01	02												
22002	Shenandoah	IA	No. 2	67,200.	34	40		01	02												
23001	East Lansing	MI	A	1.98	41	59		01	02		04										
23002	East Lansing	MI	B	1.35	41	59		01	02		04										
23003	East Lansing	MI	W	1.65	41	59		01	02		04										
24001	Bethany	MO	Pa-A	2.03	34	42		01	02												
24002	Bethany	MO	Pa-B	5.56	32	42		01	02												
24003	Bethany	MO	Pa-C	1.97	37	42		01	02												
24004	Bethany	MO	D-1	7.51	34	42		01	02												
24005	Bethany	MO	D-2	8.03	34	42		01	02												
24006	Bethany	MO	D-3	4.48	32	42		01	02	03											
24007	Bethany	MO	I-58	2.12	33	42		01	02												
24008	Bethany	MO	IJ-1	2.13	33	42		01	02												

See footnotes at end of table.

Table 2.--Index to information on experimental agricultural watersheds included in references 1-141/--
Continued

Water- shed ident. code	Study location		Water- shed name-No.	Area in acres 2/	Record (19--)		Rev. ref. No.	Index to information in reference 5/--													
	Town	State			B 3/	E 4/		01	02	03	04	05	06	07	08	09	10	11	12	13	14
25001	McCredie	MO	S.R.W.	153.	41		07	01	02		04	05	06	07	08	09	10	11	12	13	14
25002	McCredie	MO	No.2	44.3	51	63	07	01	02		04	05	06	07							
26001	Coshocton	OH	102	1.26	37	46	06	01	02		04	05	06	07	08	09	10	11	12	13	14
26002	Coshocton	OH	104	1.33	37	46		01	02		04										
26003	Coshocton	OH	129	2.71	38	72	06	01	02		04	05	06	07	08	09	10	11	12	13	14
26004	Coshocton	OH	135	2.69	38	70	06	01	02		04	05	06	07	08	09	10	11	12	13	14
26005	Coshocton	OH	130	1.63	38	72	06	01	02		04	05	06	07	08	09	10	11	12	13	14
26006	Coshocton	OH	107	2.59	38	46		01	02		04										
26007	Coshocton	OH	131	2.21	38	70	06	01	02		04	05	06	07	08	09	10	11	12	13	
26008	Coshocton	OH	132	0.59	48	70	05	01	02		04	05	06	07	08	09	10	11	12	13	
26009	Coshocton	OH	134	0.92	38	47		01	02		04										
26010	Coshocton	OH	123	1.37	39		05	01	02		04	05	06	07	08	09	10	11	12	13	14
26011	Coshocton	OH	115	1.61	39	71	06	01	02		04	05	06	07	08	09	10	11	12	13	
26012	Coshocton	OH	127	1.65	49	71	06	01	02		04	05	06	07	08	09	10	11	12	13	
26013	Coshocton	OH	109	1.69	38		06	01	02		04	05	06	07	08	09	10	11	12	13	14
26014	Coshocton	OH	103	0.65	39	71	06	01	02		04	05	06	07	08	09	10	11	12	13	
26015	Coshocton	OH	110	1.27	39	71	06	01	02		04	05	06	07	08	09	10	11	12	13	
26016	Coshocton	OH	113	1.45	39	73	06	01	02		04	05	06	07	08	09	10	11	12	13	
26017	Coshocton	OH	118	1.96	40	73	06	01	02		04	05	06	07	08	09	10	11	12	13	
26018	Coshocton	OH	111	1.18	39	71	06	01	02		04	05	06	07	08	09	10	11	12	13	
26019	Coshocton	OH	121	1.42	39	71	06	01	02		04	05	06	07	08	09	10	11	12	13	
26020	Coshocton	OH	106	1.56	39	72	06	01	02		04	05	06	07	08	09	10	11	12	13	14
26021	Coshocton	OH	188	2.05	39	71	06	01	02		04	05	06	07	08	09	10	11	12	13	
26022	Coshocton	OH	124	2.07	39	47		01	02		04										
26023	Coshocton	OH	185	7.40	39	71	06	01	02		04	05	06	07	08	09	10	11	12	13	14
26024	Coshocton	OH	187	7.20	41	71	06	01	02		04	05	06	07	08	09	10	11	12	13	14
26025	Coshocton	OH	192	7.59	39	71	06	01	02		04	05	06	07	08	09	10	11	12	13	
26026	Coshocton	OH	172	43.6	39	72	06	01	02		04	05	06	07	08	09	10	11			
26027	Coshocton	OH	169	29.0	40	71	06	01	02		04	05	06	07	08	09	10	11	12	13	
26028	Coshocton	OH	177	75.6	40	71	06	01	02		04	05	06	07	08	09	10	11	12	13	
26029	Coshocton	OH	183	74.2	38	63	06	01	02	03	04	05	06	07							
26030	Coshocton	OH	196	303.	37		06	01	02	03	04	05	06	07	08	09	10	11	12	13	14
26031	Coshocton	OH	10	122.	39	71	06	01	02		04	05	06	07	08	09	10	11	12	13	14
26032	Coshocton	OH	5	340.	40	71	06	01	02		04	05	06	07	08	09	10	11	12	13	14
26033	Coshocton	OH	92	920.	39	71	06	01	02		04	05	06	07	08	09	10	11	12	13	14
26034	Coshocton	OH	94	1,520.	39	71	06	01	02		04	05	06	07	08	09	10	11	12	13	14
26035	Coshocton	OH	95	2,570.	39	72	06	01	02		04	05	06	07	08	09	10	11	12	13	14
26036	Coshocton	OH	97	4,580.	37	71	06	01	02	03	04	05	06	07	08	09	10	11	12	13	14
26037	Coshocton	OH	994	17,500.	36	71	06	01	02		04	05	06	07	08	09	10	11			
26038	Coshocton	OH	174	52.8	60		06					05	06	07	08	09	10	11	12	13	14
26039	Coshocton	OH	194	187.	60		06					05	06	07	08	09	10	11	12	13	14
26040	Coshocton	OH	182	69.6	64	71											10	11	12	13	14
26041	Coshocton	OH	166	79.2	67															13	14
27001	Hamilton	OH	W-1	187.	38	44		01	02	03											
27002	Hamilton	OH	W-II	16.2	38	44		01	02												
27003	Hamilton	OH	W-III	28.8	38	44		01	02												
27004	Hamilton	OH	W-IV	20.3	38	44		01	02												
28001	Zanesville	OH	C.W.	2.55	34	45		01	02												
28002	Zanesville	OH	P.W.	3.57	34	45		01	02												
28003	Zanesville	OH	W.W.	2.23	34	45		01	02												
29001	Colby	WI	W-1	345.	49	66		01	02	03	04	05	06	07	08	09	10				
30001	Coon Valley	WI	No. 1	49,400.	34	40		01	02												
30002	Coon Valley	WI	No. 2	49,344.	34	40		01	02												
31001	Fennimore	WI	W-1	330.	38	67	07	01	02	03	04	05	06	07	08	09	10	11			
31002	Fennimore	WI	W-2	22.8	38	67	07	01	02	03	04	05	06	07	08	09	10	11			
31003	Fennimore	WI	W-3	52.5	38	67	07	01	02		04	05	06	07	08	09	10	11			
31004	Fennimore	WI	W-4	171.	38	67	07	01	02	03	04	05	06	07	08	09	10	11			

See footnotes at end of table.

Table 2.--Index to information on experimental agricultural watersheds included in references 1-141/--
Continued

Water- shed ident. code	Study location		Water- shed name-No.	Area in acres 2/ 3/ 4/	Record (19--) R E No.	Rev. ref. No.	Index to information in reference 5/--														
	Town	State					01	02	03	04	05	06	07	08	09	10	11	12	13	14	
32001	La Crosse	WI	U.P.W.	2.41	33	55		01	02												
32002	La Crosse	WI	U.C.W.	2.24	33	46		01	02												
32003	La Crosse	WI	C.W.	2.71	37	63	07	01	02		04	05	06	07							
32004	La Crosse	WI	C.W.A.	3.06	52	63	07	01	02		04	05	06	07							
32005	La Crosse	WI	E-3	1.01	33	42		01	02												
32006	La Crosse	WI	A-4	2.21	33	54		01	02												
33001	Bentonville	AR	W-1	10.03	38	43		01	02												
33002	Bentonville	AR	W-2	9.34	38	47		01	02												
33003	Bentonville	AR	W-3	14.25	38	47		01	02												
33004	Bentonville	AR	W-4	24.	39	47		01	02												
33005	Bentonville	AR	W-5	19.4	38	47		01	02	03											
33006	Bentonville	AR	W-6	10.75	39	47		01	02												
34001	Cherokee	OK	W-1	2.23	42	60		01	02		04										
34002	Cherokee	OK	W-2	4.82	42	60		01	02		04										
34003	Cherokee	OK	W-3	8.30	42	60		01	02		04										
34004	Cherokee	OK	W-4	4.35	42	60		01	02		04										
34005	Cherokee	OK	W-5	7.85	42	60		01	02		04										
34006	Cherokee	OK	W-6	1.75	42	60		01	02		04										
34007	Cherokee	OK	W-7	1.99	42	60		01	02		04										
34008	Cherokee	OK	W-8	4.72	41	60		01	02		04										
34009	Cherokee	OK	W-9	8.50	42	60		01	02	03	04										
34010	Cherokee	OK	W-10	1.68	60	67						05	06	07	08	09	10	11			
34011	Cherokee	OK	W-11	2.12	60	67						05	06	07	08	09	10	11			
34012	Cherokee	OK	W-12	1.68	60	67						05	06	07	08	09	10	11			
34013	Cherokee	OK	W-13	1.99	60	67						05	06	07	08	09	10	11			
34014	Cherokee	OK	W-14	2.16	60	67						05	06	07	08	09	10	11			
34015	Cherokee	OK	W-15	2.15	60	67						05	06	07	08	09	10	11			
35001	Guthrie	OK	W-1	33.40	32	53		01	02												
35002	Guthrie	OK	W-2	3.21	31	51		01	02												
35003	Guthrie	OK	W-3	3.13	30	51		01	02												
35004	Guthrie	OK	W-4	5.62	31	53		01	02												
35005	Guthrie	OK	W-5	5.28	31	47		01	02												
35006	Guthrie	OK	W-I	2.50	37	53		01	02												
35007	Guthrie	OK	W-II	5.09	42	55		01	02												
35008	Guthrie	OK	W-III	9.09	42	53		01	02												
35009	Guthrie	OK	W-IV	13.4	42	53		01	02												
35010	Guthrie	OK	W-V	15.7	42	53		01	02												
35011	Guthrie	OK	W-VI	94.8	42	55		01	02	03											
36001	Muskogee	OK	W-I	14.5	39	47		01	02												
36002	Muskogee	OK	W-II	65.4	39	45		01	02												
36003	Muskogee	OK	W-IV	24.9	38	47		01	02												
37001	Stillwater	OK	W-1	16.7	51	72	05	01	02		04	05	06	07	08	09	10	11	12	13	14
37002	Stillwater	OK	W-3	92.	51	72		01	02	03	04	05	06	07	08	09	10	11	12	13	14
37003	Stillwater	OK	W-4	206.	51	72		01	02		04	05	06	07	08	09	10	11	12	13	14
38001	Garland	TX	W-I	25.	38	47		01	02												
38002	Garland	TX	W-III	10.4	38	47		01	02												
38003	Garland	TX	W-IV	16.2	39	47		01	02												
39001	Spur	TX	W-1	11.53	27	45		01	02												
39002	Spur	TX	W-2	9.39	27	45		01	02												
39003	Spur	TX	W-3	11.71	27	44		01	02												
39004	Spur	TX	W-5	5.81	27	45		01	02												
39005	Spur	TX	W-6	6.04	27	45		01	02												
39006	Spur	TX	W-11	8.70	30	45		01	02												
39007	Spur	TX	W-12	8.41	30	45		01	02												
39008	Spur	TX	W-14	8.53	30	45		01	02												
39009	Spur	TX	W-15	8.50	30	45		01	02												
40001	Tyler	TX	W-2	9.15	43	44		01	02	03											
40002	Tyler	TX	W-3	7.94	32	42		01	02												
40003	Tyler	TX	W-4	5.75	31	42		01	02												
40004	Tyler	TX	W-5	1.73	32	42		01	02												

See footnotes at end of table.

Table 2.--Index to information on experimental agricultural watersheds included in references 1-141/--
Continued

Water- shed ident. code	Study location		Water- shed name-No.	Area in acres 2/	Record (19--)		Rev. ref. No. 4/	Index to information in reference 2/--														
	Town	State			B	E		01	02	03	04	05	06	07	08	09	10	11	12	13	14	
41001	Vega	TX	W-1	129.	38	43		01	02													
41002	Vega	TX	W-2	95.9	38	43		01	02	03												
42001	Riesel	TX	A	42.	38	43		01	02													
42002	Riesel	TX	C	579.	38		08	01	02		04	05	06	07	08	09	10	11	12	13	14	
42003	Riesel	TX	D	1,110.	37		08	01	02	03	04	05	06	07	08	09	10	11	12	13	14	
42004	Riesel	TX	G	4,380.	38		08	01	02		04	05	06	07	08	09	10	11	12	13	14	
42005	Riesel	TX	J	5,860.	37	43		01	02	03												
42006	Riesel	TX	W-1	176.	37		08	01	02	03	04	05	06	07	08	09	10	11	12	13	14	
42007	Riesel	TX	W-2	130.	37		08	01	02		04	05	06	07	08	09	10	11	12	13	14	
42008	Riesel	TX	W-6	42.3	39		08	01	02		04	05	06	07	08	09	10	11	12	13	14	
42009	Riesel	TX	W-8	40.4	38	43		01	02													
42010	Riesel	TX	W-10	19.7	38		08	01	02		04	05	06	07	08	09	10	11	12	13	14	
42011	Riesel	TX	Y	309.	37		08	01	02		04	05	06	07	08	09	10	11	12	13	14	
42012	Riesel	TX	Y-2	132.	39		08	01	02		04	05	06	07	08	09	10	11	12	13	14	
42013	Riesel	TX	Y-4	79.9	39		08	01	02		04	05	06	07	08	09	10	11	12			
42014	Riesel	TX	Y-6	20.9	39		08	01	02		04	05	06	07	08	09	10	11	12	13	14	
42015	Riesel	TX	Y-7	40.	39		08	01	02		04	05	06	07	08	09	10	11	12	13	14	
42016	Riesel	TX	Y-8	20.8	39		08	01	02		04	05	06	07	08	09	10	11	12	13	14	
42017	Riesel	TX	Y-10	21.0	38		08	01	02		04	05	06	07	08	09	10	11	12	13	14	
42018	Riesel	TX	SW-2	2.7	38	43		01	02													
42019	Riesel	TX	SW-3	3.09	39	43		01	02													
42020	Riesel	TX	SW-5	3.09	38	43		01	02													
42021	Riesel	TX	SW-6	3.04	38	43		01	02													
42022	Riesel	TX	SW-7	3.15	38	43		01	02													
42023	Riesel	TX	SW-11	3.23	38			01	02												13	14
42024	Riesel	TX	SW-12	2.97	38		08	01	02		04	05	06	07	08	09	10	11	12	13	14	
42025	Riesel	TX	SW-13	3.19	38	43		01	02													
42026	Riesel	TX	SW-14	3.02	39	43		01	02													
42027	Riesel	TX	SW-16	3.17	37	43		01	02													
42028	Riesel	TX	SW-17	2.99	39		08	01	02		04	05	06	07	08	09	10	11	12	13	14	
42029	Riesel	TX	SW-18	3.04	38	43		01	02													
42030	Riesel	TX	Z	310.	39	43		01	02													
42031	Riesel	TX	P-1	.24	38	69	08				05	06	07	08	09	10	11	12				
42032	Riesel	TX	P-2	.24	38	69	08				05	06	07	08	09	10	11	12				
42033	Riesel	TX	P-3	.24	38	69	08				05	06	07	08	09	10	11	12				
42034	Riesel	TX	P-4	.24	38	69	08				05	06	07	08	09	10	11	12				
42035	Riesel	TX	SW-19	3.25	70																	14
42036	Riesel	TX	SW-20	3.21	70																	14
42037	Riesel	TX	Y-13	11.3	69																13	14
42038	Riesel	TX	Y-14	5.6	69																13	14
42039	Riesel	TX	W-12	9.9	69																13	14
42040	Riesel	TX	W-13	11.3	69																13	14
43001	Hays	KS	6L	2.85	34	38		01	02													
43002	Hays	KS	AG	1.61	32	47		01	02													
44001	Hastings	NE	W-3	481.	38	67	06	01	02	03	04	05	06	07	08	09	10	11				
44002	Hastings	NE	W-5	411.	39	61		01	02		04	05										
44003	Hastings	NE	W-8	2,086.	39	67	06	01	02	03	04	05	06	07	08	09	10	11				
44004	Hastings	NE	W-11	3,490.	39	67	06	01	02		04	05	06	07	08	09	10	11				
44005	Hastings	NE	1-H	3.62	39	67	06	01	02		04	05	06	07	08	09	10	11				
44006	Hastings	NE	2-H	3.40	39	67	06	01	02		04	05	06	07	08	09	10	11				
44007	Hastings	NE	3-H	3.95	39	67	06	01	02		04	05	06	07	08	09	10	11				
44008	Hastings	NE	4-H	3.84	39	67	06	01	02		04	05	06	07	08	09	10	11				
44009	Hastings	NE	5-H	3.93	39	67	06	01	02		04	05	06	07	08	09	10	11				
44010	Hastings	NE	6-H	4.16	39	67	06	01	02		04	05	06	07	08	09	10	11				
44011	Hastings	NE	7-H	4.15	39	67	06	01	02		04	05	06	07	08	09	10	11				
44012	Hastings	NE	8-H	3.93	39	67	06	01	02		04	05	06	07	08	09	10	11				
44013	Hastings	NE	9-H	3.78	39	54		01	02													
44014	Hastings	NE	10-H	3.98	39	54		01	02													
44015	Hastings	NE	11-H	3.85	39	54		01	02													

See footnotes at end of table.

Table 2.--Index to information on experimental agricultural watersheds included in references 1-141/--
Continued

Water- shed ident. code	Study location		Water- shed name-No.	Area in acres	Record (19--)		Rev. ref. No.	Index to information in reference 2/--													
	Town	State			B	E		01	02	03	04	05	06	07	08	09	10	11	12	13	14
44016	Hastings	NE	12-H	3.66	39	54		01	02												
44017	Hastings	NE	13-H	3.41	39	54		01	02												
44018	Hastings	NE	14-H	3.35	39	54		01	02												
44019	Hastings	NE	15-H	3.62	39	54		01	02												
44020	Hastings	NE	16-H	3.57	39	54		01	02												
44021	Hastings	NE	17-H	3.96	39	54		01	02												
44022	Hastings	NE	18-H	3.74	39	67	06	01	02		04	05	06	07	08	09	10	11			
44023	Hastings	NE	19-H	4.10	41	54		01	02												
44024	Hastings	NE	20-H	4.05	41	54		01	02												
44025	Hastings	NE	21-H	3.94	41	54		01	02												
44026	Hastings	NE	22-H	3.99	41	67	06	01	02				06	07	08	09	10	11			
44027	Hastings	NE	23-H	4.06	41	67		01	02				06	07	08	09	10	11			
44028	Hastings	NE	24-H	4.21	41	54		01	02												
44029	Hastings	NE	25-H	2.24	63	67								07	08	09	10	11			
45001	Safford	AZ	W-I	519.	39	76	07	01	02		04	05	06	07	08	09	10	11			
45002	Safford	AZ	W-II	682.	39	76	08	01	02	03	04	05	06		08	09	10	11			
45003	Safford	AZ	W-IV	764.	39	76		01	02		04	05	06		08	09	10	11			
45004	Safford	AZ	W-V	723.	39	76	07	01	02		04	05	06	07	08	09	10	11			
46001	Colorado Spr.	CO	W-1	10.6	38	46		01	02												
46002	Colorado Spr.	CO	W-2	39.7	38	46		01	02												
46003	Colorado Spr.	CO	W-3	35.4	38	46		01	02												
46004	Colorado Spr.	CO	W-4	35.6	38	46		01	02	03											
47001	Albuquerque	NM	W-I	246.	39	76	08	01	02	03	04	05	06		08	09	10	11	12		
47002	Albuquerque	NM	W-II	40.5	39	76	07	01	02		04	05	06	07	08	09	10	11	12		
47003	Albuquerque	NM	W-III	176.	39	76	07	01	02		04	05	06	07	08	09	10	11	12		
48001	Mexican Spr.	NM	W-1	187.	38	42		01	02												
48002	Mexican Spr.	NM	W-2	610.	37	42		01	02	03											
48003	Mexican Spr.	NM	W-3	1,325.	38	42		01	02												
48004	Mexican Spr.	NM	W-6	5,550.	37	42		01	02	03											
48005	Mexican Spr.	NM	W-7	8,495.	38	42		01	02												
48006	Mexican Spr.	NM	W-8	20,910.	37	42		01	02	03											
48007	Mexican Spr.	NM	W-10	17,220.	37	42		01	02												
48008	Mexican Spr.	NM	W-11	46,080.	37	39		01	02	03											
48009	Mexican Spr.	NM	W-12	2,550.	37	39		01	02												
48010	Mexican Spr.	NM	W-13	3,360.	37	39		01	02												
48011	Mexican Spr.	NM	W-14	3,560.	37	38		01	02												
48012	Mexican Spr.	NM	W-15	4,740.	37	39		01	02												
49001	Santa Fe	NM	W-I	141.	39	48		01	02	03											
49002	Santa Fe	NM	W-II	790.	39	48		01	02												
49003	Santa Fe	NM	W-III	51.6	39	48		01	02												
50001	Placerville	CA	W-1	41.	35	44		01	02	03											
51001	Santa Paula	CA	W-1	413.	38	42		01	02												
51002	Santa Paula	CA	W-3	106.	38	42		01	02												
51003	Santa Paula	CA	W-4	44.4	38	42		01	02												
51004	Santa Paula	CA	W-5	55.1	38	42		01	02												
51005	Santa Paula	CA	W-6	163.	38	42		01	02												
51006	Santa Paula	CA	H.B.R.	735.	36	42		01	02												
51007	Santa Paula	CA	L.A.	1,607.	34	40		01	02												
51008	Santa Paula	CA	H.P.R.	1,832.	34	43		01	02												
51009	Santa Paula	CA	H.A.B.	5,939.	34	37		01	02												
52001	Sebastopol	CA	W-1	83.	36	43		01	02	03											
52002	Sebastopol	CA	W-2	56.	36	40		01	02												
53001	Vacaville	CA	W-I	40.	37	42		01	02												
54001	Watsonville	CA	W-1	16.8				01	02												
54002	Watsonville	CA	W-2	18.5				01	02												
54003	Watsonville	CA	W-3	27.4	38	42		01	02	03											
54004	Watsonville	CA	W-4	10.1	38	42		01	02												

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Table 2.--Index to information on experimental agricultural watersheds included in references 1-141/--
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Water-shed ident. code	Study location		Water-shed name-No.	Area in acres 2/	Record (19--) R F 3/		Rev. ref. No. 4/	Index to information in reference 5/--															
	Town	State			01	02		03	04	05	06	07	08	09	10	11	12	13	14				
55001	Emmett	ID	W-1	219.4	38	41		01	02														
55002	Emmett	ID	W-2	69.4	38	41		01	02	03													
56001	Moscow	ID	W-1	146.8	37	42		01	02	03													
56002	Moscow	ID	W-2	177.9	37	42		01	02	03													
57001	Newberg	OR	W-1	13.2	38	42		01	02	03													
57002	Newberg	OR	W-2	21.6	38	42		01	02														
57003	Newberg	OR	W-3	12.8	38	42		01	02	03													
57004	Newberg	OR	W-4	6.2	38	42		01	02	03													
58001	Dayton	WA	W-1	19.2	39	42		01	02														
59001	Pullman	WA	S.F.P.R.	51,900.	34	40		01	02														
59002	Pullman	WA	M.F.C.	17,600.	34	40		01	02														
59003	Pullman	WA	F.M.C.	46,000.	34	40		01	02														
60001	Pullman	WA	G.S.2	68.2	31	46		01	02	03													
60002	Pullman	WA	G.S.4	2.33	31	38		01	02														
60003	Pullman	WA	G.S.5	14.4	32	46		01	02														
60004	Pullman	WA	G.S.6	15.2	32	46		01	02														
60005	Pullman	WA	G.S.7	16,700.	32	38		01	02														
60006	Pullman	WA	G.S.8	762.	34	41		01	02	03													
60007	Pullman	WA	G.S.9	879.	41	46		01	02														
60008	Pullman	WA	G.S.10	4,430.	41	47		01	02	03													
61001	Monticello	IL	IA	82.	49	59		01	02	03	04												
61002	Monticello	IL	IR	45.5	49	59		01	02	03	04												
62001	Oxford	MS	W-4	1,580.	57		06				03	04	05	06	07	08	09	10	11	12	13	14	
62002	Oxford	MS	W-5	1,130.	57		06				03	04	05	06	07	08	09	10	11	12	13	14	
62003	Oxford	MS	W-10	5,530.	57		06				03	04	05	06	07	08	09	10	11	12	13	14	
62004	Oxford	MS	W-12	22,800.	57		06					04	05	06	07	08	09	10	11	12	13	14	
62005	Oxford	MS	W-17	32,100.	57		06					04	05	06	07	08	09	10	11	12	13	14	
62006	Oxford	MS	W-19	243.	57	64	06					04	05	06	07	08							
62007	Oxford	MS	W-24	512.	57		06					04	05	06	07	08	09	10	11	12	13	14	
62008	Oxford	MS	W-28	1,080.	57		06					04	05	06	07	08	09	10	11	12	13	14	
62009	Oxford	MS	W-30	113.	57	59						04											
62010	Oxford	MS	W-32	20,000.	57		06					04	05	06	07	08	09	10	11	12	13	14	
62011	Oxford	MS	W-34	75,000.	57		06				03	04	05	06	07	08	09	10	11	12	13		
62012	Oxford	MS	W-35	7,550.	57	72	06					04	05	06	07	08	09	10	11	12	13	14	
62013	Oxford	MS	WC-1	3,888	58		06					04	05	06	07	08	09	10	11				
62014	Oxford	MS	WC-2	1,45	58		06					04	05	06	07	08	09	10	11				
62015	Oxford	MS	WC-3	1,61	58		06					04	05	06	07	08	09	10	11				
62016	Oxford	MS	WP-4	3,01	58	63	06					04	05	06	07								
62017	Oxford	MS	W-17A	3,200.	57		06						05	06	07	08	09	10	11	12	13	14	
62018	Oxford	MS	W-35A	1,090.	57		06						05	06	07	08	09	10	11	12	13	14	
63001	Tombstone	AZ	W-1	36,900.	54		07					04	05	06	07	08	09	10		12	13	14	
63002	Tombstone	AZ	W-2	28,100.	54		07					04	05	06	07		09	10		12	13	14	
63003	Tombstone	AZ	W-3	2,220.	54		07					04	05	06	07		09	10	11	12	13	14	
63004	Tombstone	AZ	W-4	560.	54		07					04	05	06	07	08	09	10	11	12	13	14	
63005	Tombstone	AZ	W-5	5,510.	54		07					04	05	06	07								
63006	Tombstone	AZ	W-6	23,500.	62										07	08	09	10		12	13	14	
63007	Tombstone	AZ	6307	3,340.	66														10	11			
63008	Tombstone	AZ	6308	3,830.	63											08	09	10		12	13	14	
63011	Tombstone	AZ	6311	2,035.	63											08	09	10		12	13	14	
63015	Tombstone	AZ	6315	5,912.	65												09	10	11	12	13	14	
63103	Tombstone	AZ	63103	9.1	65														10	11	12		
63111	Tombstone	AZ	63111	143.	62														10	11	12		
64001	Santa Rosa	NM	W-1	42,880.	55							04	05	06	07	08	09	10		12	13	14	
65002	Newell	SD	W-2	115.	58	73						04	05	06	07	08	09	10	11	12	13	14	
65003	Newell	SD	W-3	90.	58	61						04	05										
65004	Newell	SD	W-4	105.	58	61						04	05										
65005	Newell	SD	W-5	46.	58	73						04	05	06	07	08	09	10	11	12	13	14	
65006	Newell	SD	W-6	30.	58	61						04	05										

See footnotes at end of table.

Table 2.--Index to information on experimental agricultural watersheds included in references 1-141/--
Continued

Water-shed ident. code	Study location		Water-shed name-No.	Area in acres	Record (19--)		Rev. ref. No.	Index to information in reference 5/--											
	Town	State			_{2/}	_{3/}	_{4/}	01	02	03	04	05	06	07	08	09	10	11	12
65007	Newell	SD	W-7	160.	58	73	05				04	05	06	07	08	09	10	11	12
65008	Newell	SD	W-8	160.	58	61					04	05							
65009	Newell	SD	W-9	815.	58	61					04	05							
65010	Newell	SD	W-10	280.	58	61					04	05							
65011	Newell	SD	W-11	160.	58	61					04	05							
65012	Newell	SD	W-12	90.	58	73	05				04	05	06	07	08	09	10	11	12
65013	Newell	SD	W-13	160.	58	73					04	05	06	07	08	09	10	11	12
65014	Newell	SD	W-14	35.	58	73	05				04	05	06	07	08	09	10	11	12
65015	Newell	SD	W-15	115.	58	73	05				04	05	06	07	08	09	10	11	12
65016	Newell	SD	W-16	13,000.	58	61	05				04	05							
66001	Moorefield	WV	W-1	8.57	58	67	06				04	05	06	07	08	09	10	11	
66002	Moorefield	WV	W-2	10.06	58	67	06				04	05	06	07	08	09	10	11	
66004	Moorefield	WV	W-4	6.32	58	67	06				04	05	06	07	08	09	10	11	
66005	Moorefield	WV	W-5	9.55	58	67	06				04	05	06	07	08	09	10	11	
67001	N. Danville	VT	W-1	10,610.	58						04	05	06	07	08		11	12	13
67002	N. Danville	VT	W-2	146.	58						04	05	06	07	08		11	12	13
67003	N. Danville	VT	W-3	2,067.	60							05	06	07	08		11	12	13
67004	N. Danville	VT	W-4	10,752.	60												11	12	13
67005	N. Danville	VT	W-5	27,469.	60							05	06	07	08		11	12	13
68001	Reynolds	ID	W-1	57,700.	63									07	08	09	10	11	12
68002	Reynolds	ID	W-2	8,990.	65											09	10	11	12
68003	Reynolds	ID	W-3	7,846.	66												10	11	12
68004	Reynolds	ID	W-4	13,453.	67													11	12
68011	Reynolds	ID	W-11	306.	67													11	12
68012	Reynolds	ID	W-12	205.	67													11	12
68013	Reynolds	ID	W-13	100.	66												10	11	12
68014	Reynolds	ID	W-14	33.	67													11	12
69001	Chickasha	OK	100	2,339,800.	61	78							06	07	08	09	10	11	12
69002	Chickasha	OK	200	(a)2,612,500. (b) 273,000.	61	75							06	07	08	09	10	11	12
69004	Chickasha	OK	400	112,910.	61	68							06	07	08	09	10		
69005	Chickasha	OK	500	(a)2,768,000. (b) 43,840.	64	78									08	09	10	11	12
69006	Chickasha	OK	600	(a)3,011,800. (b) 243,050.	63	71									07	08	09	10	11
69007	Chickasha	OK	700	(a)3,061,120. (b) 50,830.	61	78							06	07	08	09	10	11	12
69008	Chickasha	OK	611	4,845.	61	74							06	07	08	09			13
69009	Chickasha	OK	612	563.	61	74							06	07	08	09	10	11	12
69010	Chickasha	OK	111	16,640.	61	78							06	07	08	09	10	11	12
69011	Chickasha	OK	131	25,660.	61	78							06	07	08	09	10	11	12
69012	Chickasha	OK	411	34,180.	61	74							06	07	08	09	10	11	12
69013	Chickasha	OK	511	38,020.	61	78							06	07	08	09	10	11	12
69014	Chickasha	OK	110	25,020.	63	78								07	08	09	10	11	12
69015	Chickasha	OK	522	132,990.	63	73								07	08	09	10	11	12
69016	Chickasha	OK	512	22,530.	63	78								07	08	09	10	11	12
69017	Chickasha	OK	621	21,310.	63	73								07	08	09	10	11	12
69018	Chickasha	OK	121	131,780.	63	74								07	08	09	10	11	12
69019	Chickasha	OK	513	12,314.	65	78										09	10	11	12
69020	Chickasha	OK	514	7,225.	67	78												11	
69021	Chickasha	OK	5141	4,064.	67	78												11	
69022	Chickasha	OK	5142	360.	67	74												11	
69023	Chickasha	OK	5143	485.	67	74												11	
69024	Chickasha	OK	5144	1,456.	67	78												11	
69025	Chickasha	OK	5145	253.	67	78												11	
69026	Chickasha	OK	5146	762.	67	78												11	
69027	Chickasha	OK	311	15,206.	67	78												11	12
69030	Chickasha	OK	C-1	17.8	65	76										09	10	11	12
69031	Chickasha	OK	C-2	32.5	62											09	10	11	12
69032	Chickasha	OK	C-3	44.3	65	76											09	10	11
69033	Chickasha	OK	C-4	29.9	65	76											09	10	11
69034	Chickasha	OK	C-5	12.8	65	76											09	10	11
69035	Chickasha	OK	C-6	13.0	65	76											09	10	11
69036	Chickasha	OK	C-7	26.5	65	76											09	10	11

See footnotes at end of table.

Table 2.--Index to information on experimental agricultural watersheds included in references 1-14^{1/--}
Continued

Water- shed ident. code	Study location		Water- shed name-No.	Area in acres	Record (19--)		Rev. ref. No.	Index to information in reference ^{2/--}													
	Town	State			R	E		01	02	03	04	05	06	07	08	09	10	11	12	13	14
69037	Chickasha	OK	C-8	27.3	65	76										09	10	11	12	13	14
69038	Chickasha	OK	R-1	17.8	62	74										09	10	11	12	13	14
69039	Chickasha	OK	R-2	24.1	62	74										09	10	11	12	13	14
69040	Chickasha	OK	R-3	25.8	62	74										09	10	11	12	13	14
69041	Chickasha	OK	R-4	18.1	62	74										09	10	11	12	13	14
69042	Chickasha	OK	R-5	23.7	66	77											10	11	12	13	14
69043	Chickasha	OK	R-6	27.2	66	77											10	11	12	13	14
69044	Chickasha	OK	R-7	19.2	66	78											10	11	12	13	14
69045	Chickasha	OK	R-8	27.6	66	78											10	11	12	13	14
70001	Sonora	TX	W-14	30,720.	61	73												11	12	13	14
70002	Sonora	TX	S-9	1,774.	61	73												11	12	13	14
70003	Sonora	TX	S-10	5,392.	61	73												11	12	13	14
70004	Sonora	TX	S-11	10,787.	61	73												11	12	13	14
70005	Sonora	TX	S-12	2,801.	61	73												11	12	13	14
70006	Sonora	TX	S-13	686.	61	73												11	12	13	14
70007	Sonora	TX	W-1	10.2	63													11	12	13	14
70008	Sonora	TX	W-2	8.6	65													11	12	13	14
70009	Sonora	TX	W-3	6.7	65													11	12	13	14
70010	Sonora	TX	W-4	4.5	66													11	12	13	14
70011	Sonora	TX	W-5	7.2	66													11	12	13	14
70012	Sonora	TX	W-6	6.9	66													11	12	13	14
70013	Sonora	TX	W-7	12.2	65	73												11	12	13	14
71001	Treynor	IA	W-1	74.5	64										08	09	10	11	12	13	14
71002	Treynor	IA	W-2	82.8	64										08	09	10	11	12	13	14
71003	Treynor	IA	W-3	107.	64										08	09	10	11	12	13	14
71004	Treynor	IA	W-4	150.	64										08	09	10	11	12	13	14
71005	Treynor	IA	W-5	389.	63	74									08	09	10	11	12	13	14
72001	Cottonwood	SD	H-2	2.13	63	73										09	10	11	12	13	14
72002	Cottonwood	SD	L-2	2.38	63	73										09	10	11	12	13	14
72005	Cottonwood	SD	M-1	2.35	63	73										09	10	11	12	13	14
73002	Fort Staunton	NM	7302	32.2	66												10				
75001	Ahoskie	NC	W-A1	36,480.	64	74										09	10	11	12	13	14
75002	Ahoskie	NC	W-A2	15,360.	64	74										09	10	11	12	13	14
75003	Ahoskie	NC	W-A3	2,368.	64	74										09	10	11	12	13	14
75004	Ahoskie	NC	W-A4	1,664.	64	74										09	10	11	12	13	14

^{1/} For description of references 1-14¹, see page 2 and table 1.^{2/} (a) = total drainage area; (b) = study area.^{3/} B = year (19--) record began; E = year (19--) record ended.^{4/} Reference in which additional or revised watershed information has been included.^{5/} For explanation of reference numbers, see page 2 and table 1.

published in references 1 and 4-14, the tabular data begin at the top of the first page. On each page at the top center is a sequential page number and the decimal paging system is shown at the bottom.

The geographic location associated with each study, usually a city and State, and the local name and number of the watershed are recorded at the top of the first page for each watershed. This identification is followed by detailed information on the geographic location and the size of the watershed.

In the space to the right of the first table title, MONTHLY PRECIPITATION AND RUNOFF (inches), the location and watershed number (or designation) are given.

In the table for the current calendar year, the precipitation (P) in inches is given in the monthly columns and the yearly total in the last column, headed annual. In the line below, the corresponding runoff (Q) in inches is similarly given for each month and the total for the year. For some watersheds, data are included for years previous to the current year. Underneath, in two lines, are given the (P) and (Q) station average amounts (STA AV) by months, with average annual total for the period of record.

In the second table, entitled ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS, data are also given for the calendar year listed in the first column. Under the maximum discharge heading, the date column shows the month and day that the instantaneous peak in inches per hour occurred. In computing this rate, corrections were made, where needed, for any significant pondage above the runoff-measuring device. Under the maximum volume heading, the date refers to the month and day on which the interval began; for example, if the interval began August 30 at 2359, the entry in the date column would be 8-30. The depths for

1 hour to 8 days are the annual maximum values recorded, without regard to entire clock hours or days; thus, if the 6-hour interval began at 1332, the interval would end exactly 6 hours later at 1932. The volume given is in inches of average depth over the watershed for each of the seven selected time intervals (1, 2, 6, and 12 hours and 1, 2, and 8 days). In the last section of the table, the maximum discharges and depths for the various periods are given under MAXIMUMS FOR PERIOD OF RECORD.

Notes and footnotes below the first two tables include (1) a general statement as to watershed conditions and other physical changes for the period covered; (2) location (publication) where the most recent map may be found; (3) length of precipitation and runoff records; and (4) location of the nearest long-time National Weather Service precipitation station together with the record length.

For some watersheds, tables of daily air temperature (maximum and minimum in degrees Fahrenheit), daily precipitation (inches), and mean daily discharge (cfs) are next, with explanation of the data in footnotes at the end of each table. The multiplier to convert mean daily discharge in cubic feet per second to inches per day is given as the first note to the mean daily discharge table. Co-operating agencies are identified at the bottom of the first page for each watershed just above the index page number.

If no daily tables are given, the tabular data for selected runoff events begin in the remaining space on the first page and are carried forward on continuation sheets (or pages) until completed. In general, the selected runoff events were those in which runoff was produced by a relatively uniform rainfall excess of short duration. The information for each event includes tabulation of (1) antecedent rainfall and runoff that

occurred on the day of the event prior to the beginning of the event; (2) rainfall intensities and accumulated amounts for the event; (3) runoff rates and accumulated amounts for the event; and (4) specific watershed conditions at the time of the event.

Simple graphs of rainfall and runoff rates for all events follow the tabular data. Runoff rates expressed in both cubic feet per second (CFS) and inches per hour (IN/HR) are shown on the graphs. Some very low runoff rates expressed in IN/HR are given in the "E" format, such as 7.25 E-4, which is equal to 0.000725 IN/HR.

Maps follow the graphs unless previously published in references 3-13 or unless shown here on the map of another watershed.

In the Notes at the bottom of the first page for runoff events, the multiplier to convert runoff rates in cubic feet per second to inches per hour is given. The notes on continuation pages contain the statement on the multiplier and similar explanations of the data on each page.

New Watersheds

For the two watersheds installed in recent years and not reported previously (see table 3), the presentation begins with the watershed description in the upper part of the first page. The explanations and definitions on which the description is based are given in the next section.

The first line, centered at the top of the sheet, indicates the project location, which is the nearest city or town, and the number or name of the watershed used locally. The descriptive material is then given under the 12 major topics listed generally down the left side of the sheet: Location, Area, Slopes, Soils, Erosion, Land Capability, Geology, Surface Drainage, Character

of Flow, Instrumentation, Watershed Conditions, and Generally Represents.

After this description, the tabular data are summarized in the first two tables and notes are included as previously described for Continuing Watersheds. The tabular data for daily air temperature, precipitation, and discharge, if presented, precede the tabular data for SELECTED RUNOFF EVENTS. The rest of the material of this series for the particular watershed follows in the same order as previously indicated.

WATERSHED DESCRIPTIONS

The following definitions and explanations were used in describing watershed location; watershed characteristics, instrumentation, land management, and recommended area of application of the hydrologic data.

LOCATION gives county and State, distance and direction of the runoff gaging station from the nearest city or town, and the major river basin in which it lies. When two or more basins are involved, the tributary or subbasin is mentioned first, followed by the major basin.

AREA of watershed is given in acres if less than 640 acres and in both acres and square miles if more than 1 square mile. If areas are revised, additional values are included with notes on date of change.

SLOPES are given in terms of the ranges commonly used in survey work in the locality. The percentages of the watershed lying in each slope class are listed. As an example, 8% is in 0-2% class means that 8 percent of the watershed area has slopes ranging from 0 to 2 percent.

SOILS are described briefly, according to definitions from the U.S. Department of Agriculture "Soil Survey Manual," Agriculture Handbook 18, published in 1951. Soil descriptions are given for the new watersheds. Soil-type name consists of the soil series plus the textural

class, determined primarily by the texture of the upper part of the soil profile.

Soil texture refers to the relative proportions of the various size groups (or separates) of individual soil grains in a mass of soil. Specifically it refers to the proportions of clay, silt, and sand less than 2 mm in diameter. The various classes of texture in order of increasing percentages of the smaller size groups are (1) sand, (2) loamy sand, (3) sandy loam, (4) loam, (5) silt loam, (6) silt, (7) sandy clay loam, (8) clay loam, (9) silty clay loam, (10) sandy clay, (11) silty clay, and (12) clay. In some of the descriptions the broader classification of coarse, moderately coarse, medium, moderately fine, and fine has been used--the coarse soils are the sands and the fine soils the clays.

Soil structure refers to the aggregation of primary soil particles into compound particles, or clusters of primary particles, that are separated from adjoining aggregates by surfaces of weakness. Structure grade, or the durability of the aggregates when subjected to disturbance, is described as structureless, weak, moderate, or strong. For some soils the structureless grade is described as massive, if coherent, or single grain, if non-coherent. The size of the aggregates is reported as very fine, fine, medium, coarse, or very coarse. Structure shape is given as being platy, prismatic, columnar, angular blocky, subangular blocky, granular, or crumb.

Permeability is the quality of a soil that enables it to transmit water or air. This quality is indicated by the terms very slow, slow, moderately slow, moderate, moderately rapid, rapid, or very rapid.

Internal soil drainage is the quality of a soil that permits the downward flow of excess water through it. Internal drainage is reflected in the frequency and duration of pe-

riods of saturation with water. It is determined by the texture, structure, and other characteristics of the soil profile and of underlying layers and by the height of the water table, either permanent or perched, in relation to the water added to the soil. Internal drainage is described as none, very slow, slow, medium, rapid, or very rapid.

Soils may be grouped into soil drainage classes, based on observations and inferences used to obtain classes of runoff, soil permeability, and internal soil drainage. These classes are given in some soils descriptions to identify internal drainage. They are very poorly drained, poorly drained, imperfectly or somewhat poorly drained, moderately well drained, well drained, somewhat excessively drained, or excessively drained.

EROSION conditions on the watershed are described according to the following classification for water and wind erosion, also briefed from Agriculture Handbook 18. The percentage of the watershed in the following erosion classes is given.

Class 1.--The soil has a few rills or places with thin A horizons that give evidence of accelerated erosion, but not to an extent to alter greatly the thickness and character of the A horizon. Except for soils having very thin A horizons (less than 8 inches), the surface soil consists entirely of A horizon throughout nearly all the delineated areas. Up to about 25 percent of the original A horizon, or original plowed layer in soils with thin A horizons, has been removed from most of the area. This class also includes the areas with no erosion.

Class 2.--The soil has been eroded to the extent that ordinary tillage implements reach through the remaining A horizon or well below the depth of the original plowed layer in soils with thin A horizons. Generally the plowed layer consists of a mixture of the original A horizon and

the underlying horizons. Mapped areas of eroded soil usually have patches in which the plowed layer consists entirely of the original A horizon and others in which it consists entirely of underlying horizons. Shallow gullies may be present. Approximately 25 to 75 percent of the original A horizon or surface soil may have been lost from most of the area.

Class 3.--The soil has been eroded to the extent that all or practically all the original surface soil, or A horizon, has been removed. The plowed layer consists essentially of materials from the B or other underlying horizons. Patches in which the plowed layer is a mixture of the original A horizon and the B horizon, or other underlying horizons, may be included within mapped areas. Shallow gullies, or a few deep ones, are common in some soil types. More than about 75 percent of the original surface soil, or A horizon, and commonly part or all the B horizon, or other underlying horizons, have been lost from most of the area.

Class 4.--The land has been eroded until it has an intricate pattern of moderately deep or deep gullies. Soil profiles have been destroyed except in small areas between the gullies. Such land is not useful for crops in its present condition. Reclamation for crop production or for improved pasture is difficult, but may be practicable if other characteristics of the soil are favorable and erosion can be controlled.

Class +.--Recent alluvial and colluvial deposition.

LAND CAPABILITY is given as classified by Klingebiel and Montgomery in U.S. Department of Agriculture "Land-Capability Classification," Agriculture Handbook 210, published in 1961. The classification expresses the suitability of land for use without deterioration. The eight land-capability classes are

distinguished according to the risk of land damage or difficulty of land use. Classes I-IV are suitable for cultivation and other uses, whereas classes V-VIII are not suitable for cultivation.

Class I.--Very good land for cultivation; nearly level and productive; not subject to erosion; needs only ordinary good farming methods.

Class II.--Good land for cultivation; mostly gently sloping; not more than moderately subject to erosion; some land may be rather wet; can be farmed safely with easily applied practices.

Class III.--Moderately good land for cultivation; mostly moderately sloping; some areas too wet or too dry; can be farmed safely with practical conservation measures, carefully applied; usually a combination of two or more measures is needed.

Class IV.--Fairly good land, suitable for occasional cultivation; generally strongly sloping; often shallow or very sandy; often found in dry climate.

Class V.--Land very well suited for grazing or forestry; requires good range or woodland management.

Class VI.--Land well suited for grazing or forestry; steeply sloping land, or stony or shallow soil; eroded, droughty, or wet land; requires careful management.

Class VII.--Land fairly well suited for grazing or forestry; severely limited in use by such factors as very steep slope, shallow or droughty soil, wetness, severe erosion, or excessive salinity; requires very careful management.

Class VIII.--Land not suitable for cultivation, grazing, or forestry; may be useful for wildlife, recreation, or protection of water supplies.

WATERSHED GEOLOGY information, when available, for new watersheds is reported here. The parts of each watershed occupied by various geological formations or series are briefly

described, together with strike and dip of the strata, thickness, and relative position, when known. Faults, perched water tables, outcrops, if present, and other details relating to the movement of water within the drainage area or affecting the hydrology of the watershed are described.

SURFACE DRAINAGE refers to the ease with which excess water flows from the watershed area. The length of the principal waterway is the distance from the gaging station to the most remote point on the watershed boundary, measured along the flood plain of the watercourse.

CHARACTER OF FLOW describes the flow of the principal watercourse with respect to permanence and space. The following definitions are from Meinzer's "Outline of Ground-Water Hydrology," U.S. Geological Survey Water-Supply Paper 494, published in 1923.

As to permanence, streams may be divided into perennial, intermittent, and ephemeral streams.

A perennial stream, or stretch of a stream, flows continuously. Perennial streams are generally fed in part by springs, and their upper surfaces usually stand lower than the water table in the localities through which they flow.

Intermittent streams may be divided, with respect to their water source, into spring-fed intermittent streams and surface-fed intermittent streams. They also flow in direct response to precipitation.

A spring-fed intermittent stream, or stretch of a stream, flows only at certain times when it receives water from springs. The intermittent character of streams of this type is generally caused by fluctuations of the water table, whereby the stream channels stand part of the time below and part of the time above the water table. This is the ordinary type of intermittent stream.

A surface-fed intermittent

stream, or stretch of a stream, flows during protracted periods when it receives water from some surface source, generally the gradual and long-continued melting of snow in a mountainous or other cold tributary area. The term may be arbitrarily restricted to streams or stretches of streams that flow continuously during at least 1 month.

An ephemeral stream, or stretch of a stream, flows only in direct response to precipitation. It receives no water from springs and no long-continued supply from melting snow or other surface source. Its stream channel is at all times above the water table. The term may be arbitrarily restricted to streams or stretches of streams that do not flow continuously for as long as 1 month.

With respect to continuity in space, streams may be divided into continuous and interrupted streams. An interrupted stream contains (1) perennial stretches with intervening, intermittent, or ephemeral stretches or (2) intermittent stretches with intervening ephemeral stretches. These two classes of interrupted streams are designated, respectively, perennial interrupted streams and intermittent interrupted streams. A continuous stream does not have interruptions in space. It may be perennial, intermittent, or ephemeral, but it does not habitually have wet and dry stretches.

INSTRUMENTATION describes the type of runoff control or measuring device, number and type of precipitation gages, type of charts used, and snow courses, if employed.

WATERSHED CONDITIONS describe the general use and farm, forest, or range practices before the period of record and the conservation measures, crops, yields, and general cultural operations and practices during the period of record. Rotation crops are listed in the order grown. Operations are described with commonly used agricultural terms, and only those that appear to have a sig-

nificant relationship to the hydrology of the watershed are mentioned.

GENERALLY REPRESENTS gives the broad area of application for which the data of the specific watershed are recommended. The land resource areas named are those delineated on the map titled "Location of Experimental Agricultural Watersheds of the Science and Education Administration-Agricultural Research," on pages 26 and 27. Solid circles show the approximate locations of the continuing or new watersheds; open circles show approximate locations of the discontinued studies. For a few studies the circles indicate the locations of the project headquarters instead of the watershed locations. A larger index map with more detail is included in reference 4.

For some studies there is an apparent contradiction between the watershed location on the maps and the descriptive information under Generally Represents. This is caused by the small scale of maps; it is difficult to show many small local variations in boundaries of the land resources areas. The descriptive statements, instead of the map location, should be the guide to the application of the data.

STANDARD SYMBOLS FOR TABULAR DATA

The following capital letters have been used as standard symbols throughout this publication to designate specific items or meanings:

<u>Symbol</u>	<u>Meaning</u>
E -	value is estimated or partially estimated.
H -	precipitation in form of hail.
L -	precipitation in form of sleet or freezing rain.
M -	mixed precipitation in form of rain, snow, and sleet.

N -	precipitation in form of rain and snow.
P -	monthly or annual precipitation in inches.
Q -	monthly or annual runoff in inches.
RG -	rain gage, generally followed by gage number.
S -	precipitation in form of snow.
STA AV (or AVG) -	station average for period of record.
T -	trace, indicates that the value is not large enough to round to the lowest significant digit. In some arrays a trace value is indicated by all zeros, with more than one zero located to the right of the decimal.

Time-of-day symbols or designations a, p, m, and n used in previous publications through 1961 have been discontinued, and military time (0001 through 2400) has been substituted in publications since then. Unless stated otherwise, time used in tables is eastern, central, mountain, or Pacific standard, whichever applies to the given location.

PERSONNEL RESPONSIBLE FOR DATA PREPARATION

At each research location many individuals have contributed to the planning and establishment of the watershed and the collection, compilation, and analysis of the data. Some of those who were directly responsible for preparing the data and information for this report are--

<u>Name</u>	<u>Location</u>
R. B. Slack.....	08
A. P. Barnett.....	10
J. C. Carr, V. O. Shanholtz.....	13
R. M. Weaver.....	16
L. A. Kramer, M. Mazzocco.....	25, 71
C. A. Salrin.....	26
W. O. Ree, W. R. Gwinn, F. L. Wimberly.....	37
C. W. Richardson, D. A. Wright..	42, 70

G. C. Bolton, W. A. Champion, A. J. Bowie, C. K. Mutchler.....	62
V. A. Ferreira.....	63, 64
C. L. Hanson, A. R. Kuhlman, D. A. Woolhiser.....	65, 72
R. DeAngelis, D. Grant.....	67
R. L. Engleman.....	68
D. G. DeCoursey, M. A. Hartman, A. D. Nicks, E. D. Rhodes, R. R. Schoof, O. D. Workman.....	69
R. B. Slack, P. Yates, T. K. Woody.....	75

ADDITIONAL PUBLICATIONS

BY LOCATION

In references 1 and 4-13 (see pp. 2 and 3), citations to other publications, which present watershed data and interpretations of results in various journals, bulletins, and periodicals, are given at the end of the introduction for many of the locations. Following is a listing, by location number, of additional publications that have resulted from related work through 1970. Several publications pertaining to the overall program of hydrology that could not be tied to a specific location are listed at the end under General References.

16. Klingerstown, Pennsylvania
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Res. 6 (5): 1430-1432, illus.

Rawitz, E., Engman, E. T., and Cline, G. D.

1970. Use of the mass balance method for examining the role of soils in controlling watershed performance. Water Resources Res. 6 (4): 1115-1123, illus.

21. Iowa City, Iowa

England, C. B.

1970. Land capability: A hydrologic response unit in agricultural watersheds. U.S. Dept. Agr. ARS 41-172, 12 pp., illus.

25. McCredie, Missouri

Saxton, K. E., and Whitaker, F. D.

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1970. No-tillage corn - characteristics of the system. Agr. Engin. 51 (3): 128-131, illus.
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42. Riesel, Texas
Baird, R. W., Richardson, C. W., and Knisel, W. G., Jr.
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62. Oxford, Mississippi
Bolton, G. C., Wilson, R. B., and Bowie, A. J.
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63. Tombstone, Arizona
England, C. B., and Stephenson, G. R.
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64. Santa Rosa, New Mexico
Renard K. G., Drissel, J. C., and Osborn, H. B.
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67. North Danville, Vermont
Henderick, R. L., and Comer, G. H.
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69. Chickasha, Oklahoma
Blanchard, B. J., and DeCoursey, D. G.
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- DeCoursey, D. G., and Blanchard, B. J.
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70. Sonora, Texas
Knisel, W. G., Jr.
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72. Cottonwood, South Dakota
Hanson, C. L., Kuhlman, A. R., Erickson, C. J., and Lewis, J. K.
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74. Athens, Georgia

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UNITED STATES INDEX MAP AND RELATED DATA

[Pages 26 through 28]

LOCATION OF EXPERIMENTAL AGRICULTURAL WATERSHEDS OF THE SCIENCE & EDUCATION ADMINISTRATION, AGRICULTURAL RESEARCH (1970)

BY
LAND RESOURCE REGIONS
AND
MAJOR LAND RESOURCE AREAS
OF THE
UNITED STATES
(48 CONFORMING STATES)

KEY TO RESEARCH LOCATIONS
● 37 Current (continuing studies)
○ 33 Discontinued locations



LEGEND FOR LAND RESOURCE REGIONS AND MAJOR LAND RESOURCE AREAS (of the 48 conterminous States)

A NORTHWESTERN FOREST, FORAGE, AND SPECIALTY CROP REGION

- 1 Northern Pacific Coast Range and Valleys
- 2 Willamette and Puget Sound Valleys
- 3 Olympic and Western Slope Cascade Mountains
- 4 California Coastal Redwood Belt
- 5 Siskiyou-Trinity Area

B NORTHWESTERN WHEAT AND RANGE REGION

- 6 Eastern Slope Cascade Mountains
- 7 Columbia Basin
- 8 Columbia Plateau
- 9 Palouse and Nez Perce Prairies
- 10 Upper Snake River Lava Plains and Hills
- 11 Snake River Plains
- 12 Lost River Valleys and Mountains
- 13 Eastern Idaho Plateaus

C CALIFORNIA SUBTROPICAL FRUIT, TRUCK, AND SPECIALTY CROP REGION

- 4 Central California Valleys
- 5 Central California Coast Range
- 16 California Delta
- 17 Sacramento and San Joaquin Valleys
- 18 Sierra Nevada Foothills
- 19 Southern California Coastal Plain
- 20 Southern California Mountains

D WESTERN RANGE AND IRRIGATED REGION

- 21 Klamath and Shasta Valleys and Basins
- 22 Sierra Nevada Range
- 23 Malheur High Plateau
- 24 Humboldt Area
- 25 Weiyner High Plateau
- 26 Coalinga Basin and Mountains
- 27 Fallon Lovelock Area
- 28 Great Salt Lake Area
- 29 Southern Nevada Basin and Range
- 30 Sonoran Basin and Range
- 31 Imperial Valley

- 32 Northern Intermountain Desertic Basins
- 33 Semiarid Rocky Mountains
- 34 Central Desertic Basins, Mountains and Plateaus

- 35 Colorado and Green Rivers Plateaus
- 36 New Mexican and Colorado Plateau and Mesas
- 37 Rio Grande Valley, Mesas and Plateaus
- 38 Black Hills, and Cerbat Mountains
- 39 Arizona and New Mexico Mountains
- 40 Central Arizona Basin and Range
- 41 Southeastern Arizona Basin and Range
- 42 Southern Desertic Basins, Plains and Mountains

E

ROCKY MOUNTAIN RANGE AND FOREST REGION

- 43 Northern Rocky Mountains
- 44 Northern Rocky Mountain Valleys
- 45 Alpine Meadows and Rockland
- 46 Northern Rocky Mountain Foothills
- 47 Wasatch and Uinta Mountains
- 48 Southern Rocky Mountains
- 49 San Luis Valley
- 50 High Intermountain Valleys

Compiled by Morris E. Austin

Information from SCS, State, and other Offices

F NORTHERN GREAT PLAINS SPRING WHEAT REGION

- 52 Brown Glaciated Plain
- 53 Dark Brown Glaciated Plain
- 54 Rolling Soft Shale Plains
- 55 Black Glaciated Plains
- 56 Red River Valley of the North
- 57 Western Minnesota Forest-Prairie Transition

G

WESTERN GREAT PLAINS RANGE AND IRRIGATED REGION

- 58 Northern Rolling High Plains
- 59 Northern Smooth High Plains
- 60 Pierre Shale Plains and Badlands
- 61 Black Hills Foothills
- 62 Black Hills
- 63 Rolling Pierre Shale Plains
- 64 Mixed Sandy and Silty Tableland
- 65 Nebraska Sand Hills
- 66 Dakota-Nebraska Eroded Tableland
- 67 Central High Plains
- 68 Irrigated Upper Platte River Valley
- 69 Upper Arkansas Valley Rolling Plains
- 70 Pecon-Canadian Plains and Valleys

H

CENTRAL GREAT PLAINS WINTER WHEAT AND RANGE REGION

- 71 Central Nebraska Loess Hills
- 72 Central High Tableland
- 73 Rolling Plains and Breaks
- 74 Central Kansas Sandstone Hills
- 75 Central Loess Plains
- 76 Bluestem Hills
- 77 Southern High Plains
- 78 Central Rolling Red Plains
- 79 Great Bend Sand Plains
- 80 Central Rolling Red Prairies

I

SOUTHWESTERN PLATEAUS AND PLAINS, RANGE AND COTTON REGION

- 81 Edwards Plateau
- 82 Texas Central Basin
- 83 Rio Grande Plain

J

SOUTHWESTERN PRAIRIES, COTTON, AND FORAGE REGION

- 84 Cross Timbers
- 85 Grand Prairie
- 86 Texas Blackland Prairie
- 87 Texas Claypan Area

K

NORTHERN LAKE STATES FOREST AND FORAGE REGION

- 88 Northern Minnesota Swamps and Lakes
- 89 Minnesota Rockland Hills
- 90 Central Wisconsin and Minnesota Thin Loess and Till
- 91 Wisconsin and Minnesota Sandy Outwash
- 92 Superior Lake Plain and Wisconsin Stony, Sandy, and Rocky
- 93 Northern Michigan Sand Plains and Hills
- 94 Northern Michigan Sandy Drift

L

LAKE STATES FRUIT, TRUCK, AND DAIRY REGION

- 95 Southeastern Wisconsin Drift Plain
- 96 Western Michigan Fruit Belt
- 97 Southwestern Michigan Fruit and Truck Belt
- 98 Southern Michigan Drift Plain
- 99 Erie-Huron Lake Plain
- 100 Erie Fruit and Truck Area
- 101 Ontario-Mohawk Plain

M

CENTRAL FEED GRAINS AND LIVESTOCK REGION

- 102 Loess, Till, and Sandy Prairies
- 103 Central Iowa and Minnesota Till Prairies
- 104 Eastern Iowa and Minnesota Till Prairies

(continued)

- 105 Northern Mississippi Valley Loess Hills
- 106 Nebraska and Kansas Loess Drift Hills
- 107 Iowa and Missouri Deep Loess Hills
- 108 Illinois and Iowa Deep Loess Drift
- 109 Iowa and Missouri Loess Hills
- 110 Southern Illinois and Indiana Heavy Till Plain
- 111 Indiana and Illinois Heavy Till Plain
- 112 Chickasaw Prairies
- 113 Central Claypan Areas
- 114 Southern Illinois and Indiana Thin Loess and Till Plain
- 115 Central Mississippi Valley Wooded Slopes

N

EAST AND CENTRAL GENERAL FARMING AND FOREST REGION

- 116 Ozark Highland
- 117 Eastern Missouri
- 118 Arkansas Valley and Ridges
- 119 Ouachita Mountains
- 120 Kentucky and Indiana Sandstone and Shale Hills and Valleys
- 121 Kentucky Bluegrass
- 122 Highland Rim and Pennyrroyal
- 123 Nashville Basin
- 124 Western Allegheny Plateau
- 125 Cumberland Plateau and Mountains
- 126 Central Allegheny Plateau
- 127 Eastern Allegheny Plateau and Mountains
- 128 Southern Appalachian Ridges and Valleys
- 129 Sand Mountain
- 130 Blue Ridge

MISSISSIPPI DELTA COTTON AND FEED GRAINS REGION

- 131 Southern Mississippi Valley Alluvium
- 132 Eastern Arkansas Prairies
- 134 (See P below)

SOUTH ATLANTIC AND GULF SLOPE CASH CROP, FOREST, AND LIVESTOCK REGION

- 86 (See J Above)
- 133 Southern Coastal Plain
- 134 Southern Mississippi Valley Silty Uplands
- 135 Alabama and Mississippi Blackland Prairies
- 136 Southern Piedmont
- 137 Carolina and Georgia Sandhills
- 138 North Central Florida Ridge

R

NORTHEASTERN FORAGE AND FOREST REGION

- 139 Eastern Ohio Till Plain
- 140 Glaciated Allegheny Plateau and Catskill Mountains
- 141 Tugbill Plateau
- 142 St. Lawrence-Champlain Plain
- 143 Northeastern Mountains
- 144 New England and Eastern New York Upland
- 145 Connecticut Valley
- 146 Aroostook Area

S

NORTHERN ATLANTIC SLOPE TRUCK, FRUIT, AND PULP REGION

- 147 Northern Appalachian Ridges and Valleys
- 148 Northern Piedmont
- 149 Northern Coastal Plain

T

ATLANTIC AND GULF COAST LOWLANDS, FOREST AND TRUCK REGION

- 150 Gulf Coast Prairies
- 151 Gulf Coast Marsh
- 152 Gulf Coast Flatwoods
- 153 Atlantic Coast Flatwoods

U

FLORIDA SUBTROPICAL FRUIT, TRUCK CROP, AND RANGE REGION

- 154 South Central Florida Ridge
- 155 Southern Florida Flatwoods
- 156 Florida Everglades and Associated Areas

Table 3.--Experimental agricultural watersheds, listed by State, locality, and location number, under study during 1970 and included in this publication

State	Locality	Assigned location number	Major land resource area ^{1/}	Watershed units	Events reported	Pages
Arizona.....	Tombstone.....	63	D-41	8	14	279-313
Florida.....	Vero Beach.....	08	U-55	2	0	30-33
Georgia.....	Watkinsville.....	10	P-136	1	1	34-36
Idaho.....	Reynolds.....	68	D-23, D-25	8	6	345-374
Iowa.....	Treynor.....	71	M-107	5	5	482-496
Mississippi....	Oxford.....	62	P-133, P-134	2/11	11	239-278
Missouri.....	McCredie.....	25	M-113	1	1	60-63
New Mexico.....	Santa Rosa.....	64	G-70	1	0	314-315
North Carolina	Ahoskie.....	75	P-133	4	4	503-515
Ohio.....	Coshocton.....	26	N-124	3/19	38	64-150
Oklahoma.....	Chickasha.....	69	H-78, H-80, J-84	34	27	375-463
	Stillwater.....	37	H-80	3	3	151-161
Pennsylvania...	Klingerstown.....	16	S-147	1	1	56-59
South Dakota...	Newell.....	65	G-58, G-59, G-60	7	0	316-329
	Cottonwood.....	72	G-60	3	0	497-502
Texas.....	Riesel (Waco).....	42	J-86	4/22	22	162-238
	Sonora.....	70	I-81	13	0	464-481
Vermont.....	North Danville.....	67	R-144	5	5	330-344
Virginia.....	Blacksburg.....	13	N-128, N-130, P-136, S-148	5	5	37-55

^{1/} See location map (p. 26) and legend (p. 27).

^{2/} 1 watershed (Oxford, Miss.) discontinued, 1970.

^{3/} 15 watersheds (Coshocton, Ohio) discontinued, 1970.

^{4/} Includes data for new watersheds SW-19 and SW-20 (Riesel, Tex.).

Table 4.--Watersheds, listed by State and locality, for which data were previously included but are not in this publication^{1/}

State	Locality	Major land resource area ^{2/}	Discontinued watershed units		
			Number	Record period (19--)	Assigned location and watershed number
Mississippi.....	Oxford.....	P-133, P-134	1	57-69	62.011
Ohio.....	Coshocton.....	N-124	2	38-69	26.004,-007
			7	39-71	26.011,-014,-015,-018, 26.019,-021,-025
			1	39-73	26.016
			2	40-71	26.027,-028
			1	40-73	26.017
			1	48-70	26.008
			1	49-71	26.012

^{1/} For discontinued watershed studies prior to 1969, see tables in previous publications.

^{2/} See location map (p. 26) and legend (p. 27).

**WATERSHED DATA BY LOCATION NUMBER
AND
DECIMAL PAGING**

[8.002 - 1 TO 75.004 - 3, A TOTAL OF 486 DATA SHEETS]

**For location by States and Land Resource Areas
and Regions, see U. S. Index Map, page 26.**

VERO BEACH, FLORIDA (TAYLOR CREEK) WATERSHED W-2

LOCATION: Okeechobee County, Florida. Runoff gaging site is about 3 mi. N. of City of Okeechobee on Cemetery Road. Taylor Creek empties into Lake Okeechobee.

AREA: 63170.00 acres 98.70 sq. miles

MONTHLY PRECIPITATION AND RUNOFF (inches)							VERO BEACH, FLORIDA (TAYLOR CREEK)					WATERSHED W-2		
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
1970	P	4.81	2.62	6.89	0.15	5.94	6.67	6.86	5.52	5.08	4.28	0.06	0.41	49.29
	Q	3.005	1.164	3.659	0.350	0.363	1.000	2.442	1.140	0.370	1.503	0.245	0.157	15.396
STA AV	P	2.04	2.43	3.47	2.01	4.40	8.54	6.44	6.69	6.38	4.36	1.28	1.50	49.53
	Q	0.556	0.496	1.207	0.203	0.395	2.238	2.076	2.130	2.682	2.221	2.216	0.220	16.641

NOTES: Watershed conditions: 1970: Range & forest, 43%; improved pasture, 43%; cropland, 4%; miscellaneous, 10%. For map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1956-59, USDA Misc. Pub. 945, p. 8.2-4. Precipitation and runoff records began July 1955. Precipitation Thiessen weighted using 7 gages. Runoff data furnished by U.S. Geological Survey. For long-time precipitation records, see National Weather Service records at Okeechobee Hurricane Gate 6, Florida.

1970 DAILY AIR TEMPERATURE (degrees F)												VERO BEACH, FLORIDA (TAYLOR CREEK)	WATERSHED W-2
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
	max min	max min	max min	max min	max min	max min	max min	max min	max min	max min	max min	max min	
1	84 63	65 49	72 53	88 72	89 67	86 71	88 69	93 74	92 68	85 65	85 58	82 53	
2	78 56	69 65	74 48	87 73	83 61	83 69	93 70	94 75	93 70	92 69	86 63	83 60	
3	67 55	81 71	77 57	87 65	84 59	84 67	95 73	95 74	93 70	90 70	84 57	79 52	
4	58 46	72 30	77 58	74 65	87 61	86 70	94 71	96 70	94 71	89 68	70 39	61 50	
5	54 47	57 43	79 67	88 63	86 62	87 73	92 72	98 74	94 69	88 69	65 40	83 46	
6	70 67	61 56	71 57	87 64	83 57	85 67	90 72	94 73	95 70	86 71	73 41	77 42	
7	71 49	67 54	81 57	80 55	86 58	89 65	90 72	95 75	95 69	85 67	78 47	77 47	
8	54 29	73 49	78 63	80 57	87 58	85 66	94 72	93 76	93 70	87 68	81 51	76 50	
9	47 31	75 46	80 56	76 62	85 56	89 65	92 70	91 76	91 70	88 68	82 63	80 49	
10	48 26	75 43	73 50	62 59	84 56	87 67	89 70	88 74	94 69	87 68	85 61	80 53	
11	50 30	61 41	80 61	83 64	85 59	90 72	92 72	89 75	95 71	87 66	81 54	81 50	
12	67 52	69 50	77 67	85 70	86 62	87 68	92 73	93 76	93 73	88 65	80 59	82 57	
13	75 49	71 48	73 62	84 69	86 63	92 69	91 73	90 75	88 74	88 64	87 66	81 49	
14	67 55	76 48	71 46	88 67	87 60	92 66	92 75	91 73	85 70	88 68	88 65	77 47	
15	74 61	77 57	60 44	88 62	69 59	89 72	92 73	94 74	90 71	86 65	72 43	81 53	
16	70 56	83 67	67 46	87 59	90 59	88 70	94 72	93 73	90 72	89 67	61 35	83 65	
17	75 58	83 66	71 55	85 61	88 59	90 71	93 71	86 74	90 73	82 62	69 40	74 37	
18	75 56	73 55	72 59	82 61	89 61	90 73	93 73	92 74	89 71	82 62	75 44	80 50	
19	76 56	71 50	87 61	86 66	89 69	90 70	94 74	93 73	92 72	83 71	80 56	82 56	
20	69 48	73 51	84 63	85 69	86 70	95 73	94 76	93 71	90 70	84 69	85 54	80 49	
21	71 45	72 44	83 66	90 71	87 63	95 74	88 73	96 71	90 69	86 66	85 58	82 58	
22	61 43	67 48	88 68	93 70	87 64	93 73	87 74	91 71	90 68	83 63	85 55	83 51	
23	65 40	71 48	77 52	88 63	89 63	91 76	88 72	90 72	90 69	85 63	82 36	84 55	
24	70 48	76 51	67 49	87 68	85 70	88 71	88 73	90 74	89 72	84 65	50 29	85 60	
25	62 41	76 59	76 54	88 67	73 72	91 72	90 74	94 74	87 73	88 61	66 50	83 39	
26	75 50	79 46	74 62	86 64	87 67	90 72	90 74	90 73	87 72	84 60	76 53	64 31	
27	78 50	65 38	69 61	88 63	90 69	92 74	89 73	94 72	89 73	85 64	81 55	62 32	
28	78 56	70 51	77 71	90 64	91 70	93 76	94 73	94 73	91 71	86 62	80 54	69 39	
29	81 56		87 71	89 69	84 71	92 74	95 73	95 74	89 72	84 68	80 58	76 47	
30	82 64		89 67	91 65	86 72	90 72	92 74	91 72	84 69	87 67	82 54	75 62	
31	79 40		88 73		85 70		92 74	91 70		86 66		80 43	
AV.	69 49	65 46	77 59	83 63	86 64	86 68	92 73	92 73	88 68	86 66	75 50	79 50	
MEAN	59.0	55.4	67.8	72.9	74.9	77.4	82.1	83.0	78.2	76.2	62.5	64.2	
STA AV	74 51	73 52	77 55	83 62	87 67	89 72	90 74	91 74	88 72	86 66	78 58	73 51	

NOTES: Temperature data from R-3, readings taken daily. STA AV period from July 1, 1956 through 1970.

1970	DAILY PRECIPITATION (inches)					VERO BEACH, FLORIDA (TAYLOR CREEK)					WATERSHED W-2	
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.0	0.0	0.0	0.0	0.0	0.76	0.0	0.0	0.0	0.00	0.0	0.0
2	3.34	0.0	0.0	0.0	0.0	0.02	0.0	0.0	0.01	0.87	0.0	0.0
3	1.19	1.74	0.0	0.06	0.0	0.0	0.13	0.0	0.0	3.40	0.0	0.0
4	0.0	0.0	0.0	0.0	0.0	1.02	0.72	0.0	0.0	0.0	0.0	0.0
5	0.0	0.0	0.35	0.0	0.0	3.61	0.18	0.0	0.49	0.00	0.0	0.0
6	1.56	0.00	0.0	0.06	0.0	0.0	0.19	0.68	0.17	0.46	0.0	0.0
7	0.0	0.00	0.70	0.0	0.0	0.0	0.88	0.30	0.23	0.80	0.0	0.0
8	0.0	0.0	0.33	0.0	0.0	0.0	0.13	0.78	0.04	0.00	0.0	0.0
9	0.0	0.01	0.0	0.0	0.0	0.0	0.09	0.63	0.02	0.02	0.0	0.0
10	0.0	0.00	0.0	0.0	0.0	0.0	0.01	0.0	0.0	0.09	0.04	0.0
11	0.0	0.0	0.85	0.02	0.0	0.75	0.0	0.08	0.0	0.01	0.0	0.0
12	0.0	0.0	0.47	0.0	0.0	0.0	0.32	0.27	0.0	0.01	0.0	0.0
13	0.0	0.0	0.05	0.0	0.0	0.0	0.0	0.00	0.06	0.02	0.0	0.0
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.08	1.25	0.0	0.0	0.0
15	1.67	0.0	0.0	0.00	0.0	0.0	0.24	0.0	0.03	0.13	0.02	0.0
16	0.02	0.28	0.0	0.0	0.0	0.11	0.0	0.00	0.18	0.28	0.0	0.0
17	0.02	0.00	0.0	0.0	0.0	0.10	0.04	0.0	0.01	0.16	0.0	0.11
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.03	0.0	0.0	0.0
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.0	0.0	0.0	0.0	0.44	1.03	0.03	0.01	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	0.15	1.92	0.21	0.08	0.18	0.0	0.0
22	0.0	0.0	0.39	0.0	0.0	0.03	0.07	0.15	0.02	0.0	0.0	0.0
23	0.01	0.0	0.0	0.0	0.01	0.46	0.61	0.38	0.03	0.0	0.0	0.0
24	0.0	0.0	0.0	0.0	1.69	0.57	0.00	0.61	0.40	0.0	0.0	0.0
25	0.0	0.58	2.37	0.0	0.07	1.12	0.0	0.01	0.19	0.0	0.0	0.11
26	0.0	0.0	1.68	0.0	0.24	0.06	0.29	0.03	0.08	0.0	0.0	0.0
27	0.0	0.0	0.0	0.0	0.91	0.0	0.00	0.05	0.00	0.0	0.0	0.0
28	0.0	0.0	0.0	0.0	3.55	0.12	0.56	0.21	0.03	0.0	0.0	0.0
29	0.0	0.0	0.0	0.0	2.33	0.21	0.01	0.01	1.34	0.21	0.0	0.0
30	0.01	0.0	0.0	0.0	0.13	0.49	0.0	0.05	0.37	0.60	0.0	0.0
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00	0.0	0.18
TOTAL	4.81	2.62	6.89	0.15	5.94	6.67	6.86	5.52	5.08	4.28	0.06	0.41
STA AV	2.04	2.43	3.47	2.01	4.40	8.54	6.44	6.69	6.38	4.36	1.28	1.50

NOTES: Thiessen weighted rainfall, using 7 rain gages. STA AV based on period July 1, 1955 through 1970.

1970	MEAN DAILY DISCHARGE (cfs)					VERO BEACH, FLORIDA (TAYLOR CREEK)					WATERSHED W-2	
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	23.0	36.0	31.0	141.0	11.0	94.0	146.0	35.0	22.0	186.0	62.0	16.0
2	23.0	30.0	30.0	108.0	10.0	124.0	107.0	36.0	20.0	111.0	43.0	16.0
3	147.0	302.0	26.0	77.0	10.0	80.0	70.0	27.0	18.0	451.0	35.0	16.0
4	491.0	426.0	24.0	64.0	9.4	51.0	62.0	24.0	17.0	387.0	30.0	15.0
5	243.0	778.0	23.0	52.0	9.4	257.0	158.0	50.0	16.0	247.0	26.0	15.0
6	458.0	293.0	26.0	45.0	8.7	329.0	228.0	10.0	22.0	171.0	24.0	15.0
7	1170.0	165.0	21.0	42.0	23.0	163.0	250.0	48.0	24.0	371.0	24.0	14.0
8	664.0	110.0	95.0	56.0	11.0	96.0	680.0	132.0	34.0	418.0	23.0	14.0
9	342.0	81.0	103.0	6.7	9.9	70.0	501.0	400.0	46.0	259.0	22.0	13.0
10	207.0	74.0	71.0	23.0	10.0	46.0	273.0	364.0	35.0	165.0	19.0	13.0
11	149.0	61.0	47.0	24.0	9.1	66.0	162.0	213.0	29.0	129.0	19.0	13.0
12	114.0	58.0	247.0	24.0	8.6	134.0	107.0	156.0	24.0	106.0	19.0	13.0
13	100.0	56.0	437.0	23.0	8.6	77.0	96.0	254.0	23.0	79.0	19.0	15.0
14	78.0	49.0	263.0	22.0	7.9	26.0	75.0	152.0	46.0	65.0	19.0	15.0
15	563.0	45.0	143.0	16.0	7.3	15.0	66.0	120.0	86.0	56.0	19.0	15.0
16	1020.0	40.0	94.0	17.0	6.9	21.0	83.0	79.0	48.0	59.0	19.0	15.0
17	594.0	55.0	65.0	15.0	6.9	20.0	59.0	55.0	36.0	90.0	19.0	15.0
18	402.0	55.0	54.0	15.0	6.7	60.0	48.0	40.0	27.0	84.0	17.0	16.0
19	273.0	47.0	48.0	15.0	6.7	6.5	33.0	32.0	26.0	61.0	17.0	15.0
20	197.0	50.0	39.0	14.0	6.4	6.1	33.0	26.0	20.0	48.0	17.0	15.0
21	146.0	16.0	34.0	14.0	6.0	6.5	189.0	117.0	20.0	39.0	17.0	10.0
22	111.0	28.0	35.0	13.0	6.0	9.0	770.0	94.0	19.0	39.0	17.0	10.0
23	95.0	27.0	48.0	13.0	5.6	14.0	529.0	77.0	18.0	24.0	18.0	10.0
24	83.0	28.0	40.0	13.0	13.0	80.0	563.0	85.0	21.0	31.0	17.0	11.0
25	70.0	30.0	104.0	13.0	27.0	147.0	311.0	110.0	28.0	27.0	15.0	11.0
26	62.0	65.0	1600.0	13.0	17.0	241.0	169.0	88.0	30.0	25.0	15.0	13.0
27	55.0	47.0	2280.0	13.0	23.0	146.0	139.0	55.0	27.0	23.0	15.0	12.0
28	51.0	36.0	2060.0	12.0	85.0	82.0	115.0	44.0	23.0	21.0	15.0	11.0
29	47.0	1030.0	12.0	64.0	63.0	202.0	202.0	44.0	24.0	20.0	15.0	11.0
30	43.0	397.0	12.0	373.0	125.0	151.0	31.0	153.0	62.0	15.0	11.0	11.0
31	44.0	199.0	158.0	158.0	158.0	106.0	27.0	134.0	134.0	134.0	12.0	12.0
MEAN	257.26	110.29	313.26	30.92	31.04	88.50	209.06	97.58	32.73	128.65	21.70	13.42
INCHES	3.005	1.164	3.659	0.350	0.363	1.000	2.442	1.140	0.370	1.503	0.245	0.157
STA AV	0.556	0.496	1.207	0.203	0.395	2.238	2.076	2.130	2.682	2.221	2.216	0.220

NOTES: To convert mean daily discharge in CFS to IN/DAY, multiply by .0003768. Discharge is combined flow from Williamson Ditch and S-1 structure. Runoff data furnished by the U.S. Geological Survey. Discharge measurements generally made once a week.

VERO BEACH, FLORIDA (TAYLOR CREEK) WATERSHED W-3

LOCATION: Okeechobee County, Florida. Runoff gaging site is approximately 11 mi. (airline) N-NW of City of Okeechobee on State Road #68. Northern reach of Taylor Creek Watershed.

AREA: 10050.00 acres 15.70 sq. miles

MONTHLY PRECIPITATION AND RUNOFF (inches)				VERO BEACH, FLORIDA (TAYLOR CREEK) WATERSHED W-3									
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
1970 P	4.50	2.67	6.33	0.01	6.72	6.40	4.77	4.35	6.45	2.57	0.02	0.38	45.19
Q	2.720	1.109	3.586	0.424	0.279	0.824	0.813	0.492	0.712	1.236	0.178	0.074	12.446
STA AV P	1.92	2.31	3.44	2.34	4.39	7.67	6.74	6.52	5.95	4.18	1.17	1.46	48.10
Q	0.498	0.348	1.130	0.187	0.290	1.617	1.890	2.008	2.533	1.903	1.228	0.146	13.778

NOTES: Watershed conditions: 1970: Improved pasture, 51%; range & forest, 38%; cropland, 1%; miscellaneous, 10%. For map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1956-59, USDA Misc. Pub 945, p. 8.2-4. Precipitation and runoff records began July 1955. Precipitation Thiessen weighted using 2 gages. Runoff data furnished by U.S. Geological Survey. For long-time precipitation records, see National Weather Service records at Okeechobee Hurricane Gate 6, Florida.

1970 DAILY PRECIPITATION (inches)		VERO BEACH, FLORIDA (TAYLOR CREEK) WATERSHED W-3											
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
1	0.0	0.0	0.0	0.0	0.0	0.36	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	0.25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.83	0.0	0.0	0.0
3	1.12	1.82	0.0	0.00	0.0	0.0	0.02	0.0	0.0	0.15	0.0	0.0	0.0
4	0.0	0.0	0.0	0.0	0.0	1.27	0.24	0.0	0.0	0.0	0.0	0.0	0.0
5	0.0	0.0	0.05	0.0	0.0	0.70	0.0	0.0	0.96	0.0	0.0	0.0	0.0
6	1.46	0.0	0.0	0.01	0.0	0.0	0.28	0.38	0.0	0.20	0.0	0.0	0.0
7	0.0	0.0	0.67	0.0	0.0	0.05	0.49	0.03	1.04	0.77	0.0	0.0	0.0
8	0.0	0.0	0.35	0.0	0.0	0.0	0.18	0.0	0.0	0.61	0.0	0.0	0.0
9	0.0	0.01	0.0	0.0	0.0	0.0	0.23	0.56	0.0	0.00	0.0	0.0	0.0
10	0.0	0.01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.09	0.02	0.0	0.0
11	0.0	0.0	0.96	0.0	0.0	0.03	0.0	0.01	0.0	0.0	0.0	0.0	0.0
12	0.0	0.0	0.31	0.0	0.0	0.0	0.32	0.07	0.0	0.0	0.0	0.0	0.0
13	0.0	0.0	0.06	0.0	0.0	0.0	0.0	0.01	0.09	0.01	0.0	0.0	0.0
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.75	0.0	0.0	0.0	0.0
15	1.62	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.05	0.0	0.0	0.0	0.0
16	0.04	0.10	0.0	0.0	0.0	0.48	0.0	0.0	0.26	0.05	0.0	0.0	0.0
17	0.0	0.0	0.0	0.0	0.0	0.40	0.0	0.0	0.0	0.0	0.0	0.0	0.03
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.03	0.0	0.0	0.0	0.0
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.0	0.0	0.0	0.0	0.22	0.92	0.01	0.01	0.0	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	0.0	1.78	0.65	0.10	0.23	0.0	0.0	0.0
22	0.0	0.0	0.41	0.0	0.0	0.0	0.0	0.17	0.0	0.0	0.0	0.0	0.0
23	0.01	0.0	0.0	0.0	0.0	0.03	0.34	0.52	0.11	0.0	0.0	0.0	0.0
24	0.0	0.0	0.0	0.0	2.17	0.43	0.0	0.62	0.26	0.0	0.0	0.0	0.0
25	0.0	0.74	2.09	0.0	0.05	1.56	0.0	0.06	0.29	0.0	0.0	0.0	0.12
26	0.0	0.0	1.43	0.0	0.0	0.09	0.13	0.03	0.35	0.0	0.0	0.0	0.0
27	0.0	0.0	0.0	0.0	0.99	0.0	0.0	0.20	0.01	0.0	0.0	0.0	0.0
28	0.0	0.0	0.0	0.0	0.66	0.19	0.52	0.09	0.07	0.0	0.0	0.0	0.0
29	0.0	0.0	0.0	0.0	2.77	0.0	0.03	0.02	1.73	0.0	0.0	0.0	0.0
30	0.0	0.0	0.0	0.0	0.09	0.80	0.0	0.01	0.35	0.22	0.0	0.0	0.0
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00	0.0	0.23	
TOTAL	4.50	2.67	6.33	0.01	6.72	6.40	4.77	4.35	6.45	2.57	0.02	0.38	
STA AV	1.92	2.31	3.44	2.34	4.39	7.67	6.74	6.52	5.95	4.18	1.17	1.46	

NOTES: For daily air temperatures in the vicinity, see table for Watershed W-2, p.08.002-1. Thiessen weighted average of 2 rain gages. STA AV based on period July 1, 1955 through 1970.

1970 MEAN DAILY DISCHARGE (cfs) VERO BEACH, FLORIDA (TAYLOR CREEK) WATERSHED W-3												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	4.10	5.90	6.60	26.00	0.70	12.00	6.50	5.90	3.80	53.00	2.60	1.80
2	4.10	3.00	8.80	19.00	0.70	18.00	8.60	4.90	3.60	35.00	3.60	1.60
3	24.00	70.00	4.70	16.00	0.70	9.30	7.00	4.50	3.20	72.00	3.40	1.60
4	36.00	89.00	4.50	13.00	0.60	5.90	5.90	4.30	2.90	38.00	3.40	1.80
5	19.00	44.00	4.30	12.00	0.60	70.00	6.20	4.00	2.90	23.00	3.00	2.00
6	104.00	33.00	2.90	11.00	0.60	82.00	6.50	4.30	6.50	17.00	3.00	1.80
7	150.00	26.00	3.70	9.50	0.50	30.00	7.00	5.40	5.90	44.00	3.00	1.40
8	71.00	21.00	17.00	8.36	0.40	18.00	8.90	4.50	20.00	51.00	2.60	1.40
9	44.00	17.00	14.00	7.50	0.40	12.00	8.90	5.40	26.00	33.00	2.80	1.60
10	31.00	14.00	8.90	7.00	0.30	8.90	8.60	8.10	19.00	23.00	2.80	1.20
11	24.00	12.00	5.00	6.20	0.30	6.70	7.80	5.70	14.00	18.00	2.60	1.20
12	19.00	10.00	46.00	5.70	0.30	5.70	6.70	4.10	12.00	14.00	2.60	1.20
13	16.00	9.70	60.00	5.20	0.30	4.50	7.00	3.80	9.70	12.00	2.40	1.00
14	11.00	8.90	33.00	3.90	0.20	3.60	6.50	3.40	11.00	10.00	2.40	1.00
15	148.00	6.20	20.00	0.20	0.20	3.00	5.40	3.00	16.00	8.30	2.40	1.00
16	121.00	6.60	12.00	3.20	0.20	2.90	4.70	2.70	12.00	7.50	2.40	0.80
17	72.00	8.90	14.00	3.00	0.20	3.40	4.30	2.70	10.00	6.50	2.20	0.80
18	51.00	8.20	12.00	2.80	0.10	3.60	3.60	2.50	8.90	6.20	2.20	0.80
19	38.00	7.50	10.00	2.60	0.10	2.60	3.60	2.40	7.50	5.40	2.20	0.70
20	29.00	7.00	8.50	2.40	0.10	2.10	3.60	2.20	6.20	4.90	2.20	0.60
21	22.00	5.90	7.50	2.20	0.10	1.70	27.00	7.00	5.40	4.90	2.00	0.60
22	18.00	5.60	7.50	2.00	0.10	1.50	63.00	11.00	5.40	5.70	2.00	0.50
23	15.00	5.40	11.00	1.80	0.10	1.40	26.00	12.00	5.70	5.70	2.20	0.50
24	13.00	5.10	8.20	1.60	1.80	1.40	31.00	17.00	5.20	4.70	2.20	0.50
25	12.00	5.60	20.00	1.40	4.80	4.20	16.00	21.00	6.50	4.30	2.20	0.40
26	11.00	15.00	541.00	1.40	2.80	16.00	11.00	18.00	7.50	3.80	2.20	0.40
27	9.70	10.00	370.00	1.20	3.60	7.50	9.50	10.00	8.30	3.60	2.20	0.60
28	9.20	7.90	113.00	1.00	7.90	4.00	7.50	10.00	6.50	3.20	2.20	0.70
29	8.30		65.00	0.90	12.00	3.00	8.60	7.80	5.90	1.20	2.00	0.70
30	7.50		43.00	0.90	57.00	2.90	9.20	5.70	43.00	0.20	1.80	0.60
31	6.70		32.00		20.00		7.00	4.50		2.80		0.60
MEAN	37.052	16.729	48.842	5.963	3.797	11.593	11.074	6.703	10.017	16.835	2.500	1.013
INCHES	2.720	1.109	3.586	0.424	0.279	0.824	0.813	0.492	0.712	1.236	0.178	0.074
STA AV	0.498	0.348	1.130	0.187	0.290	1.617	1.890	2.008	2.533	1.903	1.228	0.146

NOTES: To convert mean daily discharge in CFS to IN/DAY, multiply by .002368. Runoff data furnished by U.S. Geological Survey.

WATKINSVILLE, GEORGIA WATERSHED W-1 (10001)

LOCATION: Oconee Co., Ga.; 7 mi. S.W. of Athens, near Watkinsville, Ga., Oconee River Basin.

AREA: 19.20 acres

MONTHLY PRECIPITATION AND RUNOFF (inches)														WATKINSVILLE, GEORGIA WATERSHED W-1 (10001)											
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual											
1970	F	2.57	2.19	6.81	1.43	4.07	1.06	3.97	3.19	3.09	5.83	1.74	3.52	39.47											
	Q	0.011	0.0	1.177	0.001	0.0	0.0	0.0	0.0	0.002	0.001	0.0	0.000	1.192											
STA AV	P	4.74	4.63	5.91	4.45	3.88	3.71	5.00	3.89	3.13	2.91	3.55	4.54	50.32											
	Q	0.490	0.388	0.641	0.449	0.384	0.226	0.396	0.333	0.029	0.065	0.306	0.237	3.944											
ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																									
		Maximum Discharge		1 Hour		2 Hours		Maximum Volume for Selected Time Interval								2 Days		8 Days							
		Date	Date	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.								
1970		3-20	0.282	3-19	0.233	3-19	0.427	3-19	0.678	3-19	0.750	3-19	0.789	3-19	0.822	3-19	1.177								
MAXIMUMS FOR PERIOD OF RECORD																									
		4-25	2.710	6-26	1.840	6-26	2.540	6-26	3.480	6-26	3.740	6-26	3.780	11-26	5.680	11-22	6.640								
		1945		1963		1963		1963		1963		1963		1948		1948									

NOTES: Watershed conditions: 1970: Excellent ground cover, poor grazing conditions due to very dry year; 474 cow-days grazing, 76 tons hay produced. Fertilized with 3400 lbs Ann Nitrate, 33.5% N in April, June, and August; 4000 lbs 20% super phosphate and 2950 lbs 60% phosphate pentoxide in April. For topographic map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1956-59, USDA Misc. Pub. 945, p. 10.1-8. P and Q records began Sept. 1, 1939. For long-time precipitation records, see National Weather Service records at Athens, Ga. (1885-1939) and Southern Piedmont Conservation Research Center (1940-1970).

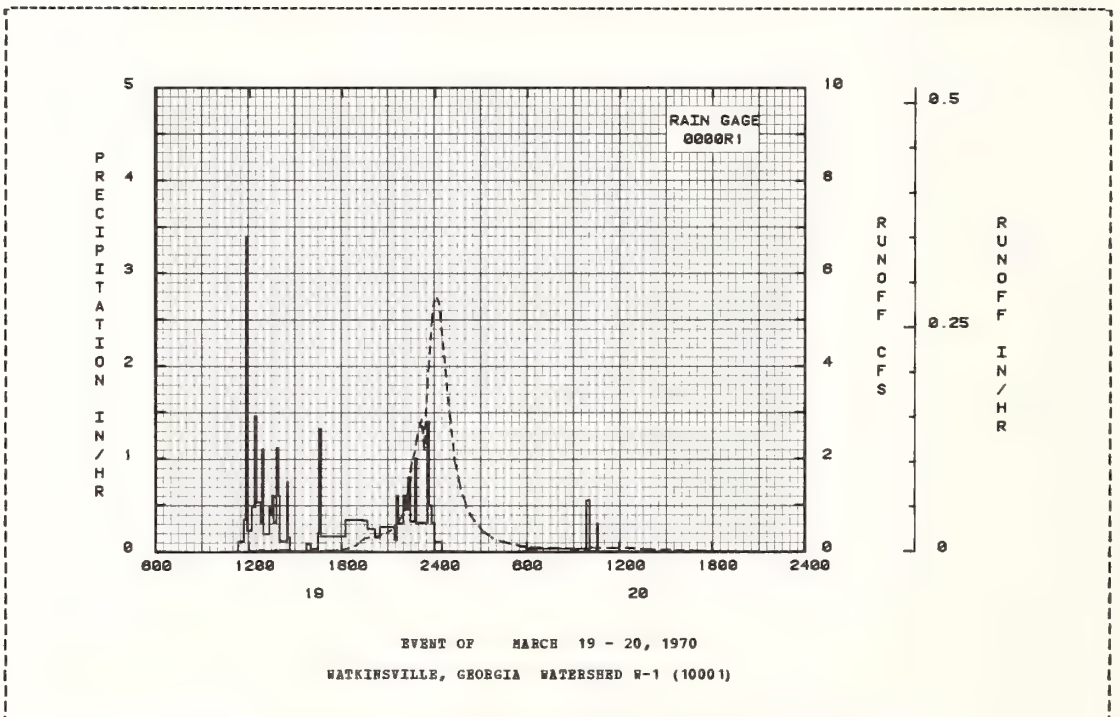
1970 DAILY AIR TEMPERATURE (degrees F)														WATKINSVILLE, GEORGIA WATERSHED W-1 (10001)												
Day	Jan max min	Feb max min	Mar max min	Apr max min	May max min	Jun max min	Jul max min	Aug max min	Sep max min	Oct max min	Nov max min	Dec max min		Day	Jan max min	Feb max min	Mar max min	Apr max min	May max min	Jun max min	Jul max min	Aug max min	Sep max min	Oct max min	Nov max min	Dec max min
1	41 29	53 31	66 41	55 46	82 62	83 66	100 68	95 72	96 69	87 49	68 58	72 43		1	41 29	53 31	66 41	55 46	82 62	83 66	100 68	95 72	96 69	87 49	68 58	72 43
2	50 20	65 48	72 36	68 40	78 60	84 66	101 72	94 72	97 67	85 54	72 50	75 45		2	50 20	65 48	72 36	68 40	78 60	84 66	101 72	94 72	97 67	85 54	72 50	75 45
3	44 28	48 15	73 42	66 34	65 55	81 63	101 71	92 73	91 70	89 56	61 40	75 44		3	44 28	48 15	73 42	66 34	65 55	81 63	101 71	92 73	91 70	89 56	61 40	75 44
4	46 24	45 9	64 53	72 35	70 51	78 67	99 69	95 74	92 70	81 44	49 37	66 36		4	46 24	45 9	64 53	72 35	70 51	78 67	99 69	95 74	92 70	81 44	49 37	66 36
5	49 22	49 18	71 47	66 43	79 44	82 63	84 67	94 71	87 69	78 42	60 38	62 28		5	49 22	49 18	71 47	66 43	79 44	82 63	84 67	94 71	87 69	78 42	60 38	62 28
6	38 34	54 26	68 36	69 46	81 51	77 56	85 60	90 72	91 70	79 41	70 42	53 31		6	38 34	54 26	68 36	69 46	81 51	77 56	85 60	90 72	91 70	79 41	70 42	53 31
7	35 12	61 31	57 45	70 40	78 45	82 55	89 59	84 70	86 69	75 57	69 38	53 20		7	35 12	61 31	57 45	70 40	78 45	82 55	89 59	84 70	86 69	75 57	69 38	53 20
8	23 9	64 27	62 41	75 32	83 46	85 52	91 65	86 70	85 70	77 66	72 37	53 21		8	23 9	64 27	62 41	75 32	83 46	85 52	91 65	86 70	85 70	77 66	72 37	53 21
9	26 5	54 31	73 42	78 53	84 50	89 55	90 68	83 73	87 68	86 68	70 37	63 35		9	26 5	54 31	73 42	78 53	84 50	89 55	90 68	83 73	87 68	86 68	70 37	63 35
10	39 6	46 31	74 39	71 50	82 60	88 62	91 72	79 68	90 66	84 65	68 49	72 38		10	39 6	46 31	74 39	71 50	82 60	88 62	91 72	79 68	90 66	84 65	68 49	72 38
11	32 23	63 31	71 43	71 43	84 60	90 61	92 62	73 66	90 71	83 61	69 46	70 40		11	32 23	63 31	71 43	71 43	84 60	90 61	92 62	73 66	90 71	83 61	69 46	70 40
12	40 32	51 29	72 51	64 55	86 55	89 59	96 64	75 69	82 68	78 61	62 43	64 41		12	40 32	51 29	72 51	64 55	86 55	89 59	96 64	75 69	82 68	78 61	62 43	64 41
13	50 23	59 29	52 34	78 57	86 58	89 62	91 67	82 68	84 65	80 60	69 38	53 35		13	50 23	59 29	52 34	78 57	86 58	89 62	91 67	82 68	84 65	80 60	69 38	53 35
14	58 18	67 29	50 31	69 47	87 58	82 65	91 67	90 65	87 61	79 64	61 44	56 26		14	58 18	67 29	50 31	69 47	87 58	82 65	91 67	90 65	87 61	79 64	61 44	56 26
15	52 28	69 45	51 28	74 39	91 58	84 60	96 68	92 67	86 60	83 64	50 37	48 25		15	52 28	69 45	51 28	74 39	91 58	84 60	96 68	92 67	86 60	83 64	50 37	48 25
16	55 33	54 42	53 19	72 47	79 63	88 66	92 71	94 69	87 61	68 45	51 28	45 40		16	55 33	54 42	53 19	72 47	79 63	88 66	92 71	94 69	87 61	68 45	51 28	45 40
17	48 39	58 38	60 23	61 50	77 51	94 64	89 62	94 70	89 68	64 37	57 24	54 35		17	48 39	58 38	60 23	61 50	77 51	94 64	89 62	94 70	89 68	64 37	57 24	54 35
18	63 42	64 40	74 51	77 53	79 44	95 69	91 64	89 70	90 64	70 34	50 30	63 28		18	63 42	64 40	74 51	77 53	79 44	95 69	91 64	89 70	90 64	70 34	50 30	63 28
19	51 34	61 33	57 45	84 58	82 46	96 68	94 63	87 68	95 67	68 45	56 41	64 31		19	51 34	61 33	57 45	84 58	82 46	96 68	94 63	87 68	95 67	68 45	56 41	64 31
20	39 26	51 29	68 55	78 58	87 49	94 67	92 68	90 68	90 67	60 54	66 45	63 56		20	39 26	51 29	68 55	78 58	87 49	94 67	92 68	90 68	90 67	60 54	66 45	63 56
21	34 14	56 25	55 47	82 49	91 53	95 70	86 69	94 70	90 72	75 57	62 33	65 47		21	34 14	56 25	55 47	82 49	91 53	95 70	86 69	94 70	90 72	75 57	62 33	65 47
22	34 12	65 24	49 41	85 45	90 58	96 68	72 68	88 70	90 67	77 51	65 30	69 45		22	34 12	65 24	49 41	85 45	90 58	96 68	72 68	88 70	90 67	77 51	65 30	69 45
23	35 24	61 45	58 35	87 66	90 59	95 67	88 71	87 72	90 66	77 50	55 21	70 61		23	35 24	61 45	58 35	87 66	90 59	95 67	88 71	87 72	90 66	77 50	55 21	70 61
24	48 25	61 35	64 34	74 58	87 58	93 66	87 72	86 71	89 68	67 55	35 16	56 32		24	48 25	61 35	64 34	74 58	87 58	93 66	87 72	86 71	89 68	67 55	35 16	56 32
25	61 25	51 32	71 39	69 57	76 61	76 69	90 69	82 66	89 64	68 56	45 14	45 24		25	61 25	51 32	71 39	69 57	76 61	76 69	90 69	82 66	89 64	68 56	45 14	45 24
26	67 46	48 23	63 37	74 60	85 63	89 70	89 70	84 70	91 64	72 55	56 20	38 21		26	67 46	48 23	63 37	74 60	85 63	89 70	89 70	84 70	91 64	72 55	56 20	38 21
27	71 38	64 28	63 32	82 64	86 58	86 67	89 70	84 68	88 67	67 54	70 29	48 25		27	71 38	64 28	63 32	82 64	86 58	86 67	89 70	84 68	88 67	67 54	70 29	48 25
28	67 31	68 34	68 35	86 65	74 61	82 60	91 69	88 68	74 54	66 53	74 37	56 30		28	67 31	68 34	68 35	86 65	74 61	82 60	91 69	88 68	74 54	66 53	74 37	56 30
29	66 43		72 46	89 62	73 68	84 55	95 71	92 68	76 45	60 56	76 41	40 36		29	66 43		72 46	89 62	73 68	84 55	95 71	92 68	76 45	60 56	76 41	40 36
30	46 28		52 41	88 63	75 64	92 56	92 71	95 70	85 41	71 60	75 46	40 33		30	46 28		52 41	88 63	75 64	92 56	92 71	95 70	85 41	71 60	75 46	40 33
31	52 24		67 41		79 63		94 74	96 69		73 63		37 33		31	52 24		67 41		79 63		94 74	96 69		73 63		37 33
AV.	47 26	58 31	64 40	74 51	81 56	87 63	91 68	88 70	88 65	75 54	62 36	58 35		AV.	47 26	58 31	64 40	74 51	81 56	87 63	91 68	88 70	88 65	75 54	62 36	58 35
MEAN	36.5	44.1	51.7	62.5	68.7	75.2	79.5	78.9	76.6	64.6	49.2	46.4		MEAN	36.5	44.1	51.7	62.5	68.7	75.2	79.5	78.9	76.6	64.6	49.2	46.4
STA AV	49 28	55 32	62 37	74 49	80 56	88 64	93 69	87 68	84 63	74 53	62 36	55 34		STA AV	49 28	55 32	62 37	74 49	80 56	88 64	93 69	87 68	84 63	74 53	62 36	55 34

1970			WATKINSVILLE, GEORGIA WATERSHED W-1 (10001)						
SELECTED RUNOFF EVENT									
ANTECEDENT CONDITIONS			RAINFALL			RUNOFF			
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)
Acc. (inches)									
EVENT OF MARCH 19 - 20, 1970									
RG 0000R1			RG 0000R1						
3-19	0.3	0.0	3-19	1118	0.0	0.0	3-19	1228	0.0
				1140	0.1091	0.04		1230	0.004
				1147	0.3429	0.08		1242	0.027
				1153	3.4000	0.42		1255	0.033
				1212	0.2211	0.49		1300	0.013
WATERSHED CONDITIONS:				1222	0.4800	0.57		1309	0.005
Dormant Coastal Beraudagrass				1229	1.4571	0.74		1322	0.009
pasture, just beginning				1245	0.5250	0.88		1333	0.003
spring growth; excellent				1251	0.3000	0.91		1342	0.015
cover.				1257	1.1000	1.02		1347	0.037
30 Day Antecedent Conditions:				1320	0.1826	1.09		1400	0.015
Rainfall Runoff				1325	0.4800	1.13		1406	0.032
Date	(inches)	(inches)		1331	0.4000	1.17		1411	0.026
02-17	0.00	0.0000		1336	0.6000	1.22		1443	0.005
02-25	1.55	0.0000		1346	0.3000	1.27		1503	0.004
03-09	0.07	0.0000							
03-17	0.01	0.0000		1353	1.1143	1.40		1522	0.0
03-18	0.05	0.0000		1400	0.6000	1.47		1630	0.0
				1428	0.1071	1.52		1640	0.0
				1432	0.7500	1.57		1654	0.008
				1440	0.1500	1.59		1700	0.016
				1545	0.0	1.59		1712	0.019
				1600	0.0800	1.61		1724	0.022
				1629	0.0207	1.62		1746	0.031
				1635	0.2000	1.64		1759	0.030
				1640	1.3201	1.75		1814	0.053
				1815	0.1579	2.00		1822	0.056
				1920	0.3415	2.37		1828	0.066
				1940	0.3300	2.48		1852	0.124
				2010	0.2400	2.60		1903	0.163
				2030	0.1500	2.65		1916	0.222
				2125	0.2618	2.89		1927	0.275
				2135	0.1200	2.91		1935	0.292
				2140	0.6000	2.96		1946	0.297
				2200	0.3000	3.06		2010	0.321
				2210	0.6000	3.16		2035	0.361
				2218	0.4500	3.22		2056	0.397
				2227	0.8000	3.34		2113	0.458
				2244	0.3177	3.43		2127	0.550
				2250	0.9999	3.53		2134	0.601
				2300	0.3000	3.58		2138	0.626
				2333	0.3091	3.75		2147	0.703
				2339	1.3999	3.89		2153	0.740
				2350	0.4909	3.98		2159	0.806
				2400	0.3000	4.03		2203	0.866
				30	0.1000	4.08		2218	1.297
				600	0.0	4.08		2224	1.566
				951	0.0260	4.18		2232	1.908
				1003	0.5500	4.29		2237	2.027
				1032	0.0	4.29		2245	2.159
				1036	0.3000	4.31		2250	2.391
								2301	2.689
								2310	2.838
								2321	3.193
								2332	3.589
								2337	3.974
								2349	4.981
								2355	5.298
								2359	5.406
								2400	5.406
								3-20	10
								18	5.320
								24	4.963
								100	2.925
								121	1.910
								142	1.352
								206	0.946
								221	0.775
								309	0.429
								348	0.283
								428	0.205
								537	0.115
								552	0.102
								700	0.073
								807	0.058
								854	0.048

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.051653.

1970 SELECTED RUNOFF EVENT			WATKINSVILLE, GEORGIA WATERSHED W-1 (10001)								
ANTECEDENT CONDITIONS			RAINFALL				RUNOFF				
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.	
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)	
EVENT OF MARCH 19 - 20, 1970 (CONTINUED)											
							3-20	950	0.038	0.7659	
								956	0.044	0.7661	
								1007	0.090	0.7667	
								1012	0.080	0.7671	
								1025	0.073	0.7679	
								1045	0.075	0.7692	
								1200	0.080	0.7742	
								1240	0.070	0.7768	
								1258	0.058	0.7778	
								1350	0.043	0.7801	
								1450	0.033	0.7820	
								1650	0.010	0.7842	
								1740	0.004	0.7845	
								1940	0.0	0.7848	

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.051653.



BLACKSBURG, VIRGINIA CRAB CREEK WATERSHED (13007)

LOCATION: Montgomery County, Va., 2 mi. W. of Christiansburg, Va., New River.

AREA: 786.00 acres 1.23 sq. miles

MONTHLY PRECIPITATION AND RUNOFF (inches)					BLACKSBURG, VIRGINIA CRAB CREEK WATERSHED (13007)										
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual	
1970	P	1.28	1.30	1.47	2.95	1.74	3.24	5.32	4.79	1.19	2.66	1.97	2.14	30.66	
	Q	0.398	0.222	0.138	0.189	0.137	0.091	0.109	0.177	0.088	0.076	0.081	0.080	1.786	
STA AV	P	2.15	2.51	3.03	2.65	2.83	2.54	3.73	3.57	2.96	2.68	2.22	2.84	33.71	
	Q	0.648	0.686	1.020	0.758	0.507	0.268	0.243	0.282	0.202	0.220	0.226	0.406	5.466	
ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS															
		Maximum Discharge		1 Hour		2 Hours		Maximum Volume for Selected Time Interval		6 Hours		12 Hours		8 Days	
		Date	Rate	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.
1970		8-20	0.009	8-20	0.006	8-10	0.009	8-10	0.019	8-10	0.027	8-10	0.036	8- 9	0.047
														1-16	0.135
MAXIMUMS FOR PERIOD OF RECORD															
		8-21	0.230	3-13	0.150	3-13	0.230	3-13	0.360	4- 3	0.420	4- 3	0.520	4- 3	0.730
		1966		1967		1967		1967		1960		1960		1960	

NOTES: Watershed conditions: Cultivated, alfalfa and other hay crops, 28%; row crop, 10%; permanent pasture, usually good cover of native bluegrass combined with other grasses and clovers, 43%; farm woods predominately hard wood, 13%; idle, 5%; roads, 1%. For topographic map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1964, USDA Misc. Pub. 1194, p. 13.7-5. Precipitation Thiessen weighted from rain gages R-1, R-2, R-3, and R-4. Station average precipitation determined from record period from August 1957 through 1970. For long-time precipitation records, see National Weather Service records for Blacksburg, Virginia.

1970 DAILY PRECIPITATION (inches)													BLACKSBURG, VIRGINIA CRAB CREEK WATERSHED (13007)	
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
1	0.0	0.0	0.0	0.49	0.0	0.30	0.0	0.00E	0.0	0.0	0.08E	0.0		
2	0.0	0.39	0.04E	0.46	0.02	0.06	0.36	0.0	0.0	0.0	0.54	0.0		
3	0.02S	0.09S	0.0	0.0	0.63	0.04	0.0	0.83	0.14E	0.0	0.05	0.01		
4	0.0	0.0	0.10	0.0	0.33	0.00	0.01	0.0	0.03E	0.0	0.11E	0.0		
5	0.0	0.0	0.00	0.0	0.0	0.08	0.0	0.0	0.04E	0.0	0.0	0.0		
6	0.19S	0.0	0.0	0.12S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
7	0.00	0.0	0.0	0.02E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
8	0.0	0.00	0.0	0.0	0.0	0.01E	0.09	0.00	0.0	0.0	0.0	0.0		
9	0.0	0.25E	0.0	0.02	0.0	0.01	0.57	1.28	0.22	0.0	0.0	0.0		
10	0.0	0.02E	0.0	0.0	0.08E	0.0	0.04	1.33	0.38	0.01	0.33	0.0		
11	0.06S	0.0	0.0	0.0	0.26E	0.74	0.0	0.0	0.0	0.05	0.07	0.01		
12	0.01S	0.0	0.39	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.53	0.16		
13	0.0	0.0	0.0	0.45	0.0	0.54	0.0	0.0	0.0	0.0	0.0	0.0		
14	0.0	0.14S	0.0	0.00	0.0	0.0	0.0	0.02	0.0	0.04	0.03	0.0		
15	0.0	0.04E	0.0	0.0	0.0	0.07	0.0	0.0	0.0	0.02	0.0	0.0		
16	0.0	0.17	0.0	0.0	0.29	0.12	0.0	0.0	0.0	0.0	0.0	0.34E		
17	0.54S	0.20	0.0	0.0	0.06	0.08	0.0	0.0	0.0	0.0	0.0	0.01		
18	0.0	0.0	0.48	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.01	0.02		
19	0.01S	0.0	0.01E	0.03	0.0	0.0	0.08	0.0	0.0	0.0	0.0	0.0		
20	0.07S	0.0	0.01E	0.17	0.0	0.18	0.56	0.86	0.0	0.18	0.22	0.0		
21	0.0	0.0	0.01E	0.0	0.0	0.00	0.42	0.0	0.0	0.32	0.0	0.93E		
22	0.0	0.0	0.23	0.0	0.0	0.0	0.21	0.0	0.0	0.0	0.0	0.09E		
23	0.07S	0.0	0.01	0.0	0.0	0.0	0.25	0.16	0.0	0.0	0.0	0.04		
24	0.0	0.0	0.0	0.01	0.0	0.0	1.40	0.0	0.0	0.0	0.0	0.0		
25	0.0	0.0	0.0	0.01	0.0	0.26	0.21E	0.0	0.0	0.0	0.0	0.01S		
26	0.0	0.0	0.05E	0.33	0.08	0.43	0.0	0.0	0.0	0.0	0.0	0.0		
27	0.0	0.0	0.0	0.12	0.0	0.31E	0.29	0.0	0.39	0.0	0.0	0.0		
28	0.0	0.0	0.0	0.72	0.0	0.0	0.0	0.0	0.0	0.01	0.0	0.0		
29	0.31	0.10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.03	0.0	0.0		
30	0.0	0.06	0.0	0.0	0.0	0.0	0.83	0.30	0.0	0.83	0.0	0.0		
31	0.0	0.00	0.0	0.0	0.0	0.00	0.0	0.0	0.0	0.17E	0.0	0.51S		
TOTAL	1.28	1.30	1.47	2.95	1.74	3.24	5.32	4.79	1.19	2.66	1.97	2.14		
STA AV	2.15	2.51	3.03	2.65	2.83	2.54	3.73	3.57	2.96	2.68	2.22	2.84		

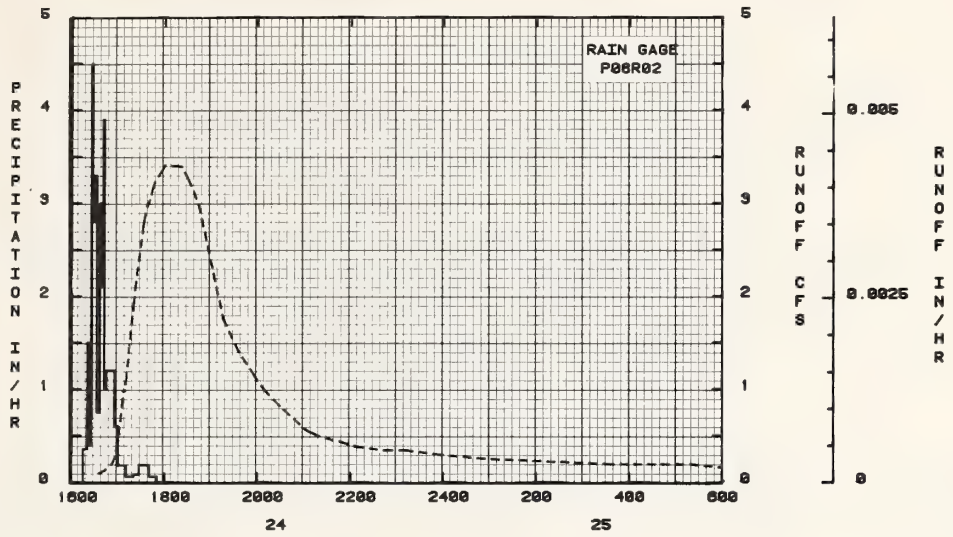
NOTES: Precipitation amounts are Thiessen weighted values from rain gages R-1, R-2, R-3, and R-4. STA AV based on record period August 1957 through 1970.

1970	MEAN DAILY DISCHARGE (cfs)					BLACKSBURG, VIRGINIA CRAB CREEK WATERSHED (13007)						
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.796	0.222	0.190	0.183	0.146	0.122	0.087	0.111	0.102	0.087E	0.111	0.071
2	0.424	0.382	0.173	0.568	0.144	0.134	0.089	0.104	0.102	0.087E	0.124	0.071
3	0.343	0.383	0.172	0.513	0.162	0.111	0.094	0.318	0.108	0.087E	0.152	0.071
4	0.260	0.506	0.172	0.426	0.324	0.111	0.090	0.169	0.102	0.080E	0.111	0.071
5	0.225	0.239	0.160	0.364	0.197	0.111	0.083	0.116	0.102	0.071	0.099	0.071
6	0.222	0.222	0.145	0.300	0.172	0.098	0.081	0.101	0.102	0.071	0.092	0.071
7	0.221	0.222	0.145	0.229	0.146	0.103	0.071	0.096	0.102	0.071	0.077	0.071
8	0.160	0.222	0.145	0.206	0.144	0.100	0.071	0.087	0.098	0.071	0.071	0.071
9	0.159	0.311	0.128	0.190	0.144	0.098	0.113	0.182	0.107	0.071	0.071	0.070
10	0.159	0.251	0.127	0.174	0.144	0.098	0.101	1.174	0.118	0.071	0.085	0.051
11	0.340	0.222	0.127	0.159	0.157	0.113	0.087	0.377	0.116	0.071	0.099	0.055
12	0.557	0.207	0.155	0.159	0.147	0.110	0.081	0.214	0.111	0.071	0.154	0.070
13	0.563	0.203	0.147	0.166	0.146	0.099	0.080	0.175	0.111	0.071	0.127	0.070
14	0.563	0.203	0.127	0.216	0.140	0.099	0.078	0.146	0.099	0.071	0.098	0.051
15	0.563	0.211	0.127	0.160	0.135	0.097	0.063	0.144	0.087	0.071	0.087	0.055
16	0.563	0.259	0.127	0.159	0.145	0.087	0.062	0.122	0.087	0.071	0.075	0.080
17	0.563	0.398	0.127	0.159	0.149	0.087	0.071	0.120	0.087	0.071	0.071	0.083
18	0.563	0.381	0.192	0.159	0.138	0.087	0.071	0.120	0.087	0.071	0.071	0.071
19	0.511	0.325	0.161	0.159	0.127	0.087	0.071	0.120	0.087	0.071	0.071	0.062
20	3.446	0.257	0.159	0.164	0.127	0.087	0.083	0.489	0.087	0.075	0.086	0.062
21	0.580	0.227	0.159	0.140	0.127	0.087	0.097	0.188	0.087	0.100	0.072	0.206
22	0.620	0.222	0.176	0.127	0.127	0.087	0.117	0.145	0.087	0.077	0.071	0.137
23	0.618	0.222	0.161	0.127	0.123	0.087	0.108	0.133	0.087	0.071	0.071	0.116
24	0.585	0.222	0.159	0.127	0.122	0.087	0.450	0.120	0.087	0.071	0.068	0.111
25	9.515	0.222	0.150	0.127E	0.127	0.094	0.175	0.111	0.087	0.071	0.078	0.111
26	0.486	0.208	0.127	0.135E	0.137	0.122	0.126	0.111	0.087	0.071	0.071	0.106
27	0.314	0.191	0.127	0.159E	0.127	0.128	0.113	0.111	0.107	0.071	0.071	0.091
28	0.249	0.190	0.127	0.159	0.127	0.090	0.111	0.111	0.099E	0.071	0.071	0.087
29	0.349		0.127	0.159	0.127	0.087	0.102	0.111	0.087E	0.111	0.071	0.087
30	0.385		0.127	0.159	0.127	0.087	0.421	0.113	0.087E	0.209	0.071	0.087
31	0.242		0.127		0.127		0.151	0.102		0.116		0.141
MEAN	0.4240	0.2618	0.1475	0.2077	0.1462	0.0999	0.1161	0.1885	0.0969	0.0813	0.0889	0.0848
INCHES	0.398	0.222	0.138	0.189	0.137	0.091	0.109	0.177	0.088	0.076	0.081	0.080
STA AV	0.648	0.686	1.020	0.758	0.507	0.268	0.243	0.282	0.202	0.220	0.226	0.406

NOTES: To convert CFS to IN/DAY, multiply by 0.030281. STA AV based on record period August 1957 through 1970.

1970	SELECTED RUNOFF EVENT			BLACKSBURG, VIRGINIA CRAB CREEK WATERSHED (13007)							
ANTECEDENT CONDITIONS			RAINFALL				RUNOFF				
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.	
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)	
EVENT OF JULY 24 - 25, 1970											
RG P08R02											
7-24	0.0	0.002	7-24	1615	0.0	0.0	7-24	1636	0.103	0.0	
				1620	0.3600	0.03		1644	0.143	0.0	
				1622	1.5003	0.08		1652	0.198	0.0	
				1625	0.4000	0.10		1656	0.269	0.0	
				1627	4.4990	0.25		1700	0.444	0.0	
WATERSHED CONDITIONS:											
Permanent pasture, blue grass				1630	2.7998	0.39		1706	0.096	0.0001	
combined with other native				1632	3.3008	0.50		1707	0.991	0.0001	
grasses and clover, good				1636	0.7500	0.55		1709	0.983	0.0001	
cover, 43%; row crop, 10%;				1638	2.9994	0.65		1711	1.181	0.0001	
alfalfa and other hay, good				1640	2.1005	0.72		1712	1.252	0.0001	
cover, 28%; idle with weeds,											
grasses, and vines, good				1642	3.8992	0.85		1720	1.918	0.0004	
cover, 85%; farm woods				1645	0.9999	0.90		1723	2.156	0.0005	
predominately hard wood, 13%;				1650	1.2001	1.00		1732	2.750	0.0010	
paved roads, 1%.				1655	1.2001	1.10		1735	2.893	0.0012	
				1700	0.5999	1.15		1747	3.226	0.0020	
				1710	0.1800	1.18		1800	3.408	0.0029	
				1720	0.0600	1.19		1822	3.392	0.0045	
				1727	0.0858	1.20		1834	3.186	0.0053	
				1740	0.1846	1.24		1844	2.972	0.0059	
				1750	0.0601	1.25		1916	1.752	0.0075	
				1800	0.0	1.25		1936	1.395	0.0062	
								2000	1.086	0.0088	
								2009	0.991	0.0090	
								2028	0.824	0.0094	
								2104	0.547	0.0099	
								2120	0.491	0.0101	
								2148	0.428	0.0104	
								2208	0.380	0.0106	
								2246	0.341	0.0109	
								2312	0.341	0.0111	
								2400	0.293	0.0114	
							7-25	54	0.254	0.0117	
								340	0.190	0.0125	
								520	0.190	0.0129	

NOTES: To convert CFS to IN/HR, multiply by 0.0012617.



EVENT OF JULY 24 - 25, 1970
 BLACKSBURG, VIRGINIA CRAB CREEK WATERSHED (13007)

BLACKSBURG, VIRGINIA BRUSH CREEK WATERSHED (13008)

LOCATION: Floyd County, Va.; 1 mi. W. of Terrys Fork, Va. Little River, New River.

AREA: 893.00 acres 1.40 sq. miles

MONTHLY PRECIPITATION AND RUNOFF (inches)						BLACKSBURG, VIRGINIA BRUSH CREEK WATERSHED (13008)										
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual			
1970	P	1.07	1.64	1.01	3.27	1.82	3.44	4.90	2.60	1.01	3.06	2.42	1.87	28.11		
	Q	1.169	1.198	1.026	1.309	0.965	0.668	0.644	0.623	0.342	0.511	0.880	0.731	10.069		
STA AV	P	2.21	2.78	3.10	2.89	3.15	2.43	3.80	3.72	3.35	2.96	2.45	2.88	35.71		
	Q	1.743	1.915	2.232	1.781	1.460	0.936	0.870	0.853	1.019	1.122	1.163	1.471	16.465		
ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																
	Maximum Discharge Rate		1 Hour		2 Hours		Maximum Volume for Selected Time Interval									
	Date	Rate	Date	Vol.	Date	Vol.	6 Hours		12 Hours		1 Day		2 Days		8 Days	
							Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.
1970	7-24	0.086	7-24	0.073	7-24	0.108	7-24	0.141	7-24	0.157	4- 2	0.176	4- 1	0.260	4- 1	0.517
MAXIMUMS FOR PERIOD OF RECORD																
	9-30	1.160	9-30	0.620	9-30	0.910	9-30	1.620	9-30	2.170	9-29	2.590	9-29	2.810	9-29	3.230
	1959		1959		1959		1959		1959		1959		1959		1959	

NOTES: Watershed conditions: Permanent pasture, usually a fair cover of native grasses, 33%; farm woods, a mixture of hardwoods and conifers, 34%; row crops, 4%; hay, 20%; idle land, 7%; roads, 2%. For topographic map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1964, USDA Misc. Pub. 1194, p. 13.8-5. Precipitation: Thiessen weighted from R-1 and R-2. Station averages determined from continuous records from August 1957 through 1970. For long-time precipitation records, see National Weather Service records at Blacksburg, Virginia.

1970	DAILY PRECIPITATION (inches)					BLACKSBURG, VIRGINIA			BRUSH CREEK WATERSHED (13008)			
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.0	0.0	0.0	0.61	0.0	0.11	0.0	0.0	0.0	0.0	0.14	0.0
2	0.0	0.70	0.04E	0.67	0.0	0.07	0.07E	0.0	0.0	0.0	0.24	0.0
3	0.0	0.07	0.0	0.0	0.48	0.0	0.01E	0.46	0.05	0.0	0.05	0.0
4	0.0	0.0	0.04E	0.0	0.68	0.12	0.0	0.0	0.40	0.0	0.21H	0.0
5	0.0	0.0	0.0	0.0	0.0	1.31	0.0	0.0	0.0	0.0	0.0	0.0
6	0.23S	0.0	0.0	0.12	0.0	0.42E	0.0	0.0	0.0	0.0	0.0	0.0
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9	0.0	0.21E	0.0	0.04	0.0	0.0	0.74	0.90	0.0	0.0	0.0	0.0
10	0.0	0.01E	0.0	0.0	0.0	0.01	0.01	0.98	0.27	0.05	0.68	0.0
11	0.05S	0.0	0.0	0.0	0.03	0.06	0.0	0.0	0.0	0.0	0.09	0.0
12	0.06S	0.0	0.22	0.0	0.0	0.0	0.0	0.01	0.0	0.0	0.60	0.10
13	0.0	0.0	0.0	0.24	0.0	0.58E	0.0	0.01	0.0	0.0	0.0	0.0
14	0.0	0.11S	0.0	0.03E	0.0	0.0	0.0	0.0	0.0	0.01	0.09	0.0
15	0.0	0.0	0.0	0.0	0.0	0.10E	0.0	0.0	0.0	0.04	0.01	0.0
16	0.0	0.26	0.0	0.0	0.38	0.0	0.0	0.0	0.0	0.0	0.0	0.22H
17	0.41	0.26	0.0	0.0	0.20	0.10E	0.0	0.0	0.0	0.0	0.0	0.17
18	0.0	0.0	0.45	0.0	0.0	0.0	0.0	0.13	0.0	0.0	0.0	0.0
19	0.01E	0.0	0.0	0.0	0.0	0.0	0.01	0.0	0.0	0.0	0.0	0.0
20	0.05E	0.0	0.0	0.01E	0.0	0.13E	0.07	0.0	0.0	0.26	0.31	0.0
21	0.0	0.0	0.0	0.0	0.0	0.12	1.17	0.0	0.0	0.53	0.0	0.71E
22	0.0	0.0	0.14	0.0	0.0	0.0	0.25	0.0	0.0	0.0	0.0	0.05E
23	0.05E	0.0	0.01E	0.0	0.0	0.0	0.84	0.11E	0.0	0.0	0.0	0.02E
24	0.0	0.0	0.0	0.51	0.0	0.0	1.22	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.20E	0.16E	0.0	0.0	0.0	0.0	0.0
26	0.0	0.0	0.01E	0.30	0.05E	0.08E	0.0	0.0	0.0	0.0	0.0	0.0
27	0.0	0.0	0.0	0.05	0.0	0.04E	0.18	0.0	0.29	0.0	0.0	0.0
28	0.0	0.0	0.0	0.68	0.0	0.0	0.01	0.0	0.0	0.0	0.0	0.0
29	0.21	0.0	0.06	0.0	0.0	0.0	0.0	0.0	0.0	0.59	0.0	0.0
30	0.0	0.0	0.0	0.0	0.0	0.0	0.17	0.0	0.0	1.22	0.0	0.0
31	0.0	0.0	0.03	0.0	0.0	0.0	0.0	0.0	0.35	0.0	0.60S	0.0
TOTAL	1.07	1.64	1.01	3.27	1.82	3.44	4.90	2.60	1.01	3.06	2.42	1.87
STA AV	2.21	2.78	3.10	2.89	3.15	2.43	3.80	3.72	3.35	2.96	2.45	2.88

NOTES: Precipitation amounts are Thiessen weighted values from rain gages R-1 and R-2. STA AV based on record period August 1957 through 1970.

1970 MEAN DAILY DISCHARGE (cfs) BLACKSBURG, VIRGINIA BRUSH CREEK WATERSHED (13008)												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	2.787	1.265	1.207	2.387	1.198	0.765	0.486	0.554	0.453	0.373	1.422	0.774
2	1.963	4.186	1.270	6.324	1.137	0.778	0.475	0.501	0.451	0.358	0.950	0.774
3	1.662	2.345	1.238	2.859	1.498	0.649	0.452	0.773	0.431	0.335	1.311	0.774
4	1.338	1.428	1.322	2.033	4.797	0.735	0.415	0.655	0.683	0.291	1.065	0.708
5	1.247	1.395	1.303	1.672	2.242	3.337	0.393	0.527	0.593	0.313	1.376	0.695
6	1.279	1.372	1.204	1.573	1.598	1.818	0.388	0.526	0.469	0.324	1.018	0.675
7	1.225	1.370	1.171	1.448	1.340	1.157	0.383	0.512	0.447	0.327	0.819	0.634
8	1.155	1.368	1.133	1.300	1.211	0.796	0.385	0.525	0.446	0.371	0.733	0.685
9	0.629	1.797	1.135	1.283	1.132	0.711	0.923	1.471	0.432	0.386	0.702	0.779
10	0.332	1.516	1.135	1.173	1.068	0.671	0.693	4.295	0.480	0.437	1.577	0.803
11	0.511	1.323	1.135	1.114	1.083	0.686	0.504	1.391	0.579	0.429	1.828	0.774
12	0.917	1.234	1.345	1.114	1.104	0.672	0.458	0.888	0.464	0.427	2.514	0.867
13	1.033	1.222	1.294	1.235	1.066	0.866	0.414	0.730	0.448	0.411	1.680	0.746
14	0.990	1.182	1.138	1.528	0.973	0.954	0.405	0.656	0.410	0.394	1.193	0.702
15	0.990	1.476	1.075	1.164	0.913	0.851	0.378	0.641	0.388	0.449	1.150	0.693
16	1.057	2.062	1.068	1.135	1.030	0.789	0.344	0.580	0.374	0.429	0.949	0.903
17	2.316	2.787	1.081	1.104	1.952	0.744	0.306	0.546	0.374	0.422	0.918	1.278
18	3.213	2.068	2.055	1.066	1.049	0.675	0.305	0.633	0.374	0.429	0.888	0.947
19	1.776	1.777	1.363	1.063	0.904	0.562	0.310	0.647	0.360	0.450	0.865	0.847
20	1.400	1.462	1.304	1.047	0.851	0.830	0.330	0.594	0.375	0.502	1.451	0.808
21	1.342	1.334	1.212	1.005	0.838	0.709	0.872	0.572	0.385	1.127	1.042	2.297
22	1.045	1.378	1.583	0.954	0.818	0.614	1.357	0.561	0.347	0.620	0.940	1.551
23	0.950	1.364	1.342	0.947	0.807	0.556	1.514	0.647	0.332	0.547	0.876	1.252
24	0.990	1.351	1.233	1.943	0.720	0.536	5.851	0.594	0.331	0.522	0.693	1.062
25	1.296	1.276	1.207	1.244	0.675	0.714	1.537	0.527	0.330	0.522	0.702	0.960
26	2.422	1.207	1.207	1.637	0.779	0.710	0.840	0.527	0.325	0.522	0.855	0.821
27	1.721	1.207	1.120	1.474	0.736	0.589	0.804	0.498	0.479	0.522	0.929	0.768
28	2.025	1.207	1.078	3.173	0.718	0.549	0.773	0.466	0.464	0.543	0.918	0.704
29	1.549	1.218	1.767	0.688	0.530	0.605	0.445	0.422	0.422	0.902	0.849	0.673
30	1.384	1.135	1.366	0.659	0.502	0.649	0.451	0.391	0.391	2.921	0.810	0.723
31	1.330		1.181		0.670		0.633	0.454		2.586		0.749
MEAN	1.4152	1.6056	1.2418	1.6376	1.1685	0.8352	0.7799	0.7545	0.4278	0.6190	1.1008	0.8847
INCHES	1.169	1.198	1.026	1.309	0.965	0.668	0.644	0.623	0.342	0.511	0.880	0.731
STA AV	1.743	1.815	2.232	1.781	1.460	0.936	0.870	0.853	1.019	1.122	1.163	1.471

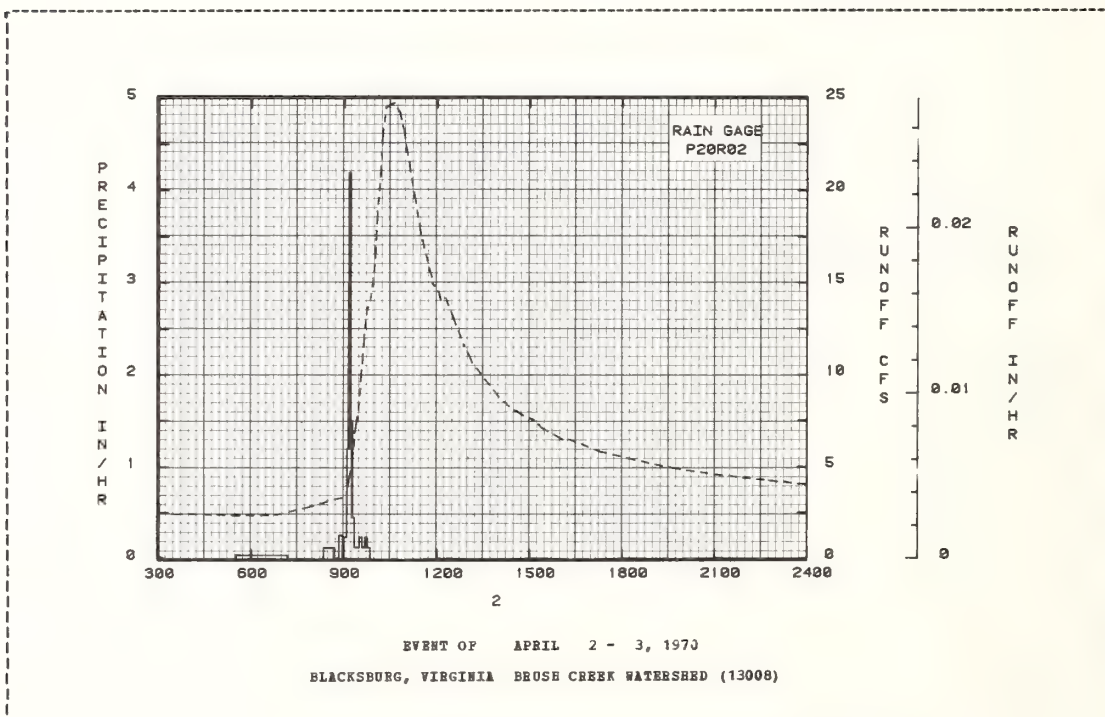
NOTES: To convert CFS to IN/DAY, multiply by 0.026652. STA AV based on record period August 1957 through 1970.

1970 SELECTED RUNOFF EVENT BLACKSBURG, VIRGINIA BRUSH CREEK WATERSHED (13008)												
ANTECEDENT CONDITIONS			RAINFALL				RUNOFF					
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.		
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)		
EVENT OF APRIL 2 - 3, 1970												
4- 2	RG P20R02 0.03	0.010	4- 2	RG P20R02 530	0.0	0.0	4- 2	324	2.458	0.0		
				710	0.0420	0.07		346	2.458	0.0010		
				820	0.0	0.07		524	2.359	0.0054		
				830	0.1200	0.09		632	2.368	0.0084		
				835	0.1200	0.10		700	2.476	0.0097		
WATERSHED CONDITIONS:				840	0.1200	0.11		740	2.755	0.0116		
Permanent pasture of native				850	0.0	0.11		800	2.899	0.0126		
grasses, good cover, 33%;				857	0.2571	0.14		820	3.052	0.0137		
woods, mixture of pine and				900	0.0	0.14		828	3.188	0.0142		
hardwood with considerable				905	0.2400	0.16		856	3.332	0.0159		
undergrowth, good cover,												
34%; hay, 20%; row crop, 4%;				908	1.2000	0.22		904	3.458	0.0164		
idle land, 7%; roads, 2%.				909	3.0001	0.27		905	3.575	0.0165		
				910	4.2001	0.34		909	4.187	0.0168		
				912	4.1999	0.48		912	4.772	0.0170		
				914	1.2000	0.52		917	5.763	0.0175		
				916	1.5000	0.57		922	7.177	0.0181		
				920	0.4500	0.60		926	7.753	0.0187		
				930	0.1200	0.62		928	8.257	0.0190		
				935	0.2400	0.64		929	8.518	0.0192		
				940	0.1200	0.65		931	9.284	0.0195		
				945	0.2400	0.67		932	9.887	0.0197		
				950	0.1200	0.68		935	10.778	0.0203		
								939	12.210	0.0212		
								944	13.579	0.0224		
								946	13.696	0.0229		
								950	14.047	0.0239		
								956	15.253	0.0255		
								1000	16.586	0.0267		
								1002	17.856	0.0273		
								1004	18.900	0.0280		
								1011	21.345	0.0306		
								1013	22.709	0.0314		
								1015	23.357	0.0323		
								1017	23.727	0.0332		
								1020	24.528	0.0345		

NOTES: To convert CFS to IN/HR, multiply by 0.0011105.

1970	SELECTED RUNOFF EVENT					BLACKSBURG, VIRGINIA BRUSH CREEK WATERSHED (13008)				
ANTECEDENT CONDITIONS			RAINFALL			RUNOFF				
Date Mo-Day	Rainfall (inches)	Runoff (inches)	Date Mo-Day	Time of Day	Intensity (in/hr)	Acc. (inches)	Date Mo-Day	Time of Day	Rate (cfs)	Acc. (inches)
EVENT OF APRIL 2 - 3, 1970 (CONTINUED)										
							4- 2	1036	24.780	0.0418
								1047	24.231	0.0468
								1055	23.231	0.0503
								1100	22.295	0.0524
								1106	21.376	0.0548
								1116	19.684	0.0586
								1128	17.676	0.0627
								1134	16.901	0.0646
								1149	15.308	0.0691
								1150	14.956	0.0694
								1154	14.830	0.0705
								1204	14.407	0.0732
								1206	14.083	0.0737
								1216	14.173	0.0763
								1222	13.759	0.0778
								1232	13.074	0.0803
								1251	11.589	0.0846
								1253	11.607	0.0850
								1308	10.643	0.0881
								1400	8.797	0.0975
								1420	8.293	0.1007
								1432	8.032	0.1025
								1448	7.780	0.1048
								1504	7.573	0.1071
								1508	7.564	0.1077
								1524	7.113	0.1099
								1604	6.483	0.1149
								1616	6.492	0.1163
								1716	5.826	0.1231
								1812	5.439	0.1289
								1940	4.907	0.1373
								2102	4.556	0.1445
								2400	4.025	0.1586
							4- 3	46	3.845	0.1620

NOTES: To convert CFS to IN/HR, multiply by 0.0011105.



BLACKSBURG, VIRGINIA LITTLE WINNS CREEK WATERSHED (13010)

LOCATION: Halifax County, Va., 3.5 mi. SW of Tuberville, Va., Winns Creek, Dan River.

AREA: 1471.00 acres 2.30 sq. miles

MONTHLY PRECIPITATION AND RUNOFF (inches)						BLACKSBURG, VIRGINIA LITTLE WINNS CREEK WATERSHED (13010)									
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual	
1970	P	1.54	3.23	2.91	2.39	2.18	2.44	4.52	4.31	0.23	3.41	3.77	3.00	33.93	
	Q	0.377	0.943	0.614	0.694	0.405	0.199	0.300	0.396	0.107	0.161	0.492	0.434	5.121	
STA AV	P	3.01	3.26	3.36	2.83	3.52	3.09	3.99	4.14	2.69	2.95	2.51	3.19	38.55	
	Q	0.916	1.181	1.257	0.938	0.799	0.562	0.443	0.519	0.340	0.564	0.492	0.539	8.550	
ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS															
		Maximum Discharge		1 Hour		2 Hours		Maximum Volume for Selected Time Interval							
		Date	Rate	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.
1970		4-2	0.034	4-2	0.029	4-2	0.049	11-14	0.100	2-17	0.155	2-16	0.241	2-16	0.340
MAXIMUMS FOR PERIOD OF RECORD															
		10-10	1.120	10-10	0.710	10-10	1.030	10-10	1.410	10-10	1.510	10-10	1.580	10-10	1.620
		1959		1959		1959		1959		1959		1959		1959	

NOTES: Watershed conditions: Farm woods, mixture of hardwoods and conifers, with pine predominating, 58%; cultivated, 18%; pasture, native grass mixture, usually fair cover, 8%; idle, 16%. For topographic map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1968, USDA Misc. Pub. 1330, p. 13.010-5. For drainage pattern map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1960-61, USDA Misc. Pub. 994, p. 13.10-8. Precipitation: Thiessen weighted from R-1, R-2, and R-3. Station averages determined from continuous records from Jan. 1958 through 1970. For long-time precipitation records, see National Weather Service records at Halifax (1 mile N), Virginia.

1970 DAILY PRECIPITATION (inches)													BLACKSBURG, VIRGINIA LITTLE WINNS CREEK WATERSHED (13010)	
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
1	0.0	0.0	0.0	0.34	0.0	0.0	0.0	0.07E	0.0	0.0	0.41	0.0		
2	0.0	0.45	0.03	0.52	0.0	0.0	0.04E	0.0	0.0	0.0	0.0	0.0		
3	0.0	0.50	0.0	0.0	0.34	0.0	0.0	0.53	0.0	0.0	0.18	0.0		
4	0.0	0.0	0.15	0.0	0.89	0.0	0.81E	0.04	0.04E	0.0	0.37	0.0		
5	0.0	0.0	0.0	0.0	0.0	0.0	0.02E	0.0	0.0	0.0	0.0	0.0		
6	0.33S	0.0	0.0	0.03	0.0	0.34	0.0	0.83	0.0	0.0	0.0	0.0		
7	0.06S	0.0	0.0	0.0	0.0	0.03	0.0	0.0	0.0	0.0	0.0	0.0		
8	0.0	0.00	0.0	0.0	0.0	0.0	0.0	0.02	0.0	0.0	0.0	0.0		
9	0.0	0.41	0.0	0.01	0.0	0.0	0.69	0.12	0.0	0.0	0.0	0.0		
10	0.0	0.0	0.0	0.0	0.0	0.0	1.27	2.02	0.0	0.0	0.80	0.0		
11	0.03S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.47	0.0		
12	0.08S	0.0	0.52	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.34	0.0		
13	0.0	0.0	0.0	0.31	0.0	0.0	0.0	0.0	0.0	0.0	0.01	0.0		
14	0.0	0.0	0.0	0.10	0.0	0.0	0.0	0.0	0.0	0.0	1.11	0.0		
15	0.0	0.00	0.0	0.0	0.0	0.0	0.07E	0.0	0.0	0.65	0.0	0.0		
16	0.0	1.05E	0.0	0.0	0.29	0.0	0.0	0.0	0.0	0.13	0.0	1.00		
17	0.13N	0.71E	0.0	0.0	0.53	0.0	0.0	0.0	0.0	0.0	0.0	0.01		
18	0.01N	0.01E	0.73	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
19	0.05S	0.0	0.0	0.0	0.0	0.0	0.0	0.68	0.0	0.0	0.0	0.0		
20	0.06S	0.0	0.14	0.09	0.0	0.0	0.44	0.01	0.0	0.05	0.08E	0.0		
21	0.0	0.0	0.12	0.0	0.0	0.13	0.18	0.0	0.0	0.88	0.0	0.94		
22	0.0	0.0	0.47	0.0	0.0	0.98	0.04	0.0	0.0	0.0	0.0	0.03		
23	0.03S	0.0	0.08	0.0	0.0	0.11	0.37	0.0	0.0	0.0	0.0	0.20		
24	0.0	0.0	0.0	0.0	0.0	0.0	0.01	0.0	0.0	0.0	0.0	0.01		
25	0.0	0.08E	0.0	0.0	0.0	0.82	0.57	0.0	0.0	0.0	0.0	0.0		
26	0.0	0.0	0.0	0.74	0.13	0.03	0.0	0.0	0.0	0.0	0.0	0.0		
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.16	0.0	0.0	0.0		
28	0.0	0.0	0.0	0.25	0.0	0.0	0.0	0.0	0.03	0.0	0.0	0.0		
29	0.76	0.0	0.26	0.0	0.0	0.0	0.0	0.0	0.0	0.09	0.0	0.0		
30	0.0	0.0	0.08	0.0	0.0	0.0	0.0	0.0	0.0	1.58	0.0	0.0		
31	0.0	0.0	0.35	0.0	0.0	0.0	0.0	0.0	0.0	0.03	0.82S			
TOTAL	1.54	3.23	2.91	2.39	2.18	2.44	4.52	4.31	0.23	3.41	3.77	3.00		
STA AV	3.01	3.26	3.36	2.83	3.52	3.09	3.99	4.14	2.69	2.95	2.51	3.19		

NOTES: Precipitation amounts are Thiessen weighted values from rain gages R-1, R-2, and R-3. STA AV based on record period January 1958 through 1970.

1970 MEAN DAILY DISCHARGE (cfs) BLACKSBURG, VIRGINIA LITTLE WINNS CREEK WATERSHED (13010)												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.927	0.931	0.816	2.030	0.798	0.467	0.323	0.301	0.314	0.224	0.682	0.558
2	0.822	1.600	0.842	9.355	0.767	0.447	0.317	0.238	0.301	0.218	0.539	0.549
3	0.756	5.242	0.790	3.246	0.892	0.427	0.334	0.528	0.299	0.208	0.540	0.549
4	0.707	1.896	0.850	2.039	3.121	0.420	0.687	0.396	0.297	0.163	0.840	0.549
5	0.672	1.342	0.815	1.618	1.889	0.420	0.508	0.311	0.292	0.206	0.515	0.549
6	0.720	1.156	0.756	1.416	1.234	0.431	0.323	1.781	0.271	0.216	0.460	0.520
7	0.716	1.034	0.756	1.253	1.036	0.589	0.297	0.501	0.260	0.226	0.453	0.504
8	0.617	0.958	0.756	1.127	0.942	0.399	0.278	0.400	0.257	0.220	0.415	0.531
9	0.566	1.264	0.745	1.083	0.842	0.389	0.436	0.435	0.236	0.225	0.424	0.549
10	0.622	1.242	0.725	1.053	0.760	0.367	5.295	8.513	0.229	0.184	0.763	0.549
11	0.604	1.086	0.712	0.986	0.741	0.359	0.566	1.543	0.222	0.150	2.710	0.549
12	0.682	0.964	0.942	0.938	0.716	0.334	0.423	0.704	0.221	0.159	0.505	0.570
13	0.639	0.890	0.922	0.957	0.671	0.327	0.401	0.605	0.220	0.168	1.246	0.542
14	0.624	0.838	0.795	1.180	0.636	0.336	0.379	0.526	0.217	0.151	3.352E	0.504
15	0.620	0.816	0.767	0.969	0.624	0.345	0.372	0.495	0.199	0.417	6.727E	0.504
16	0.606	1.852	0.756	0.890	0.707	0.326	0.333	0.456	0.200	0.288	1.243	1.321
17	0.684	14.893	0.756	0.890	1.029	0.308	0.299	0.424	0.185	0.231	0.892	1.032
18	0.846	5.958	2.248	0.890	0.695	0.279	0.287	0.419	0.176	0.252	0.766	0.700
19	0.742	3.366	1.610	0.890	0.627	0.263	0.290	1.020	0.169	0.252	0.698	0.653
20	0.670	2.027	1.360	0.924	0.607	0.275	0.586	0.670	0.185	0.283	0.672	0.639
21	0.577	1.635	1.284	0.847	0.584	0.354	0.441	0.457	0.209	0.715	0.631	3.376
22	0.557	1.400	3.918	0.816	0.562	0.883	0.396	0.434	0.168	0.364	0.608	2.151
23	0.675	1.170	2.537	0.798	0.550	0.426	0.750	0.440	0.150	0.311	0.566	1.633
24	0.700	1.023	1.812	0.788	0.531	0.346	0.465	0.412	0.140	0.311	0.589	1.393
25	0.591	1.037	1.451	0.756	0.507	0.918	1.300	0.377	0.142	0.311	0.549	1.095
26	0.588	0.903	1.308	1.066	0.579	0.511	0.527	0.369	0.131	0.311	0.549	0.924
27	0.615	0.890	1.134	1.118	0.512	0.397	0.433	0.363	0.166	0.311	0.549	0.828
28	0.608	0.839	1.062	1.119	0.482	0.345	0.412	0.339	0.272	0.311	0.545	0.756
29	1.411		1.338	1.010	0.470	0.332	0.375	0.326	0.238	0.324	0.500	0.708
30	2.035		1.110	0.851	0.469	0.334	0.348	0.340	0.225	1.589	0.491	0.712
31	1.110		2.275		0.469		0.330	0.344		0.647		0.811E
MEAN	0.7519	2.0804	1.2241	1.4302	0.8080	0.4104	0.5971	0.7892	0.2197	0.3208	1.0142	0.8648
INCHES	0.377	0.943	0.614	0.694	0.405	0.199	0.300	0.396	0.107	0.161	0.492	0.434
STA AV	0.916	1.181	1.257	0.938	0.799	0.562	0.443	0.519	0.340	0.564	0.492	0.539

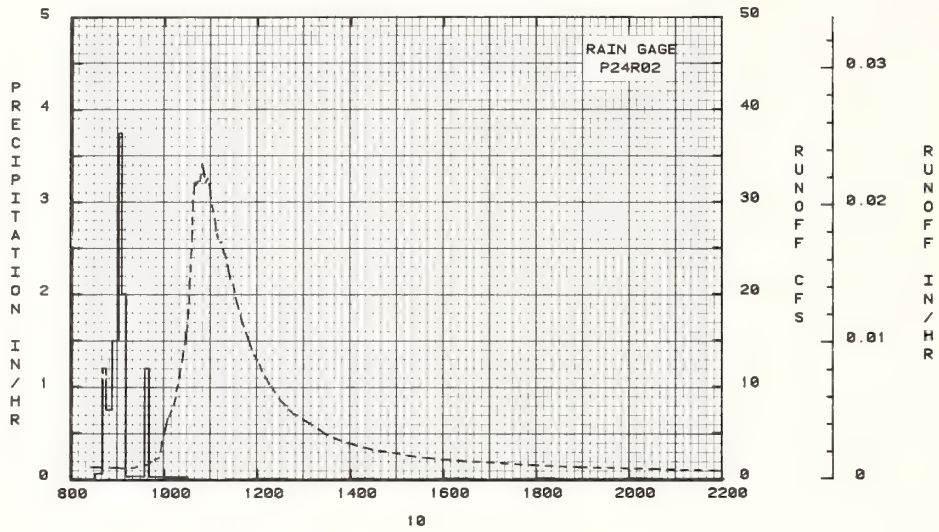
NOTES: To convert CFS to IN/DAY, multiply by 0.016178. STA AV based on record period January 1958 through 1970.

1970	SELECTED RUNOFF EVENT			BLACKSBURG, VIRGINIA			LITTLE WINNS CREEK WATERSHED (13010)				
ANTECEDENT CONDITIONS			RAINFALL			RUNOFF					
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.	
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)	
EVENT OF JULY 10, 1970											
7-10	EG P24R02 0.43	0.037	7-10	EG P24R02							
				830	0.0	0.0	7-10	824	1.305	0.0	
				840	0.0601	0.01	840	1.231	0.0002		
				844	1.2000	0.09	854	1.231	0.0004		
				852	0.7499	0.19	908	1.142	0.0006		
				900	1.5000	0.39	920	1.231	0.0008		
WATERSHED CONDITIONS:											
Farm woods, mixture of				904	3.7500	0.64	925	1.365	0.0009		
hardwoods and conifers				910	2.0001	0.84	940	1.632	0.0012		
with pine predominating, 58%;				934	0.0250	0.85	942	1.884	0.0012		
cultivated, 18%; pasture				940	1.2000	0.97	947	2.136	0.0013		
native grass mixture,				1030	0.0240	0.99	953	2.299	0.0015		
usually fair cover, 8%;							955	3.011	0.0016		
idle, 16%.							957	4.064	0.0017		
							1001	5.444	0.0019		
							1004	6.541	0.0021		
							1006	6.764	0.0022		
							1009	7.372	0.0024		
							1012	7.965	0.0027		
							1014	8.796	0.0029		
							1015	9.537	0.0030		
							1017	10.245	0.0032		
							1019	11.347	0.0035		
							1020	11.940	0.0036		
							1023	13.275	0.0040		
							1024	13.809	0.0041		
							1026	14.684	0.0044		
							1027	15.826	0.0046		
							1028	15.975	0.0048		
							1029	16.642	0.0050		
							1030	17.606	0.0052		
							1032	21.745	0.0056		
							1034	24.963	0.0062		
							1035	26.862	0.0065		
							1036	30.199	0.0068		
							1038	32.142	0.0075		
							1039	31.846	0.0078		

NOTES: To convert CFS to IN/HR, multiply by 0.0006741.

1970	SELECTED RUNOFF EVENT			BLACKSBURG, VIRGINIA LITTLE WINNS CREEK WATERSHED (13010)							
ANTECEDENT CONDITIONS			RAINFALL				RUNOFF				
Date Mo-Day	Rainfall (inches)	Runoff (inches)	Date Mo-Day	Time of Day	Intensity (in/hr)	Acc. (inches)	Date Mo-Day	Time of Day	Rate (cfs)	Acc. (inches)	
EVENT OF JULY 10, 1970 (CONTINUED)											
							7-10	1042	32.246	0.0089	
								1045	32.291	0.0100	
								1048	34.115	0.0110	
								1051	32.721	0.0121	
								1052	32.127	0.0124	
								1055	32.602	0.0135	
								1058	31.312	0.0146	
								1059	30.392	0.0149	
								1105	27.574	0.0169	
								1106	26.891	0.0172	
								1107	26.491	0.0175	
								1108	26.180	0.0178	
								1111	25.631	0.0186	
								1113	25.660	0.0192	
								1116	24.444	0.0201	
								1119	23.910	0.0209	
								1122	22.531	0.0216	
								1124	21.700	0.0221	
								1128	21.018	0.0231	
								1130	20.217	0.0236	
								1131	19.609	0.0238	
								1135	18.422	0.0247	
								1139	17.191	0.0255	
								1147	15.233	0.0270	
								1152	14.061	0.0278	
								1155	13.394	0.0283	
								1159	12.845	0.0289	
								1202	12.400	0.0293	
								1205	11.688	0.0297	
								1215	10.249	0.0309	
								1218	9.953	0.0312	
								1229	8.529	0.0323	
								1236	7.965	0.0330	
								1240	7.476	0.0333	
								1244	7.238	0.0336	
								1246	7.016	0.0338	
								1251	6.853	0.0342	
								1303	6.170	0.0351	
								1319	5.310	0.0361	
								1330	4.717	0.0367	
								1339	4.405	0.0372	
								1356	3.886	0.0380	
								1408	3.589	0.0385	
								1428	3.145	0.0393	
								1524	2.373	0.0410	
								1548	2.151	0.0416	
								1600	2.047	0.0419	
								1620	1.943	0.0423	
								1754	1.454	0.0441	
								1856	1.216	0.0450	
								2040	1.009	0.0463	

NOTES: To convert CFS to IN/HR, multiply by 0.0006741.



BLACKSBURG, VIRGINIA ROCKY RUN BRANCH WATERSHED (13011)

LOCATION: Brunswick County, Va., on Route No. 58, 4 mi. W. of Lawrenceville, Va., Meherrin River.

AREA: 555.00 acres

MONTHLY PRECIPITATION AND RUNOFF (inches)						BLACKSBURG, VIRGINIA ROCKY RUN BRANCH WATERSHED (13011)											
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual			
1970	P	1.39	3.08	4.27	2.63	2.66	3.63	9.78	4.32	0.58	3.24	2.33	2.86	40.77			
	Q	0.549	0.896	1.050	1.123	0.514	0.284	2.097	0.574	0.152	0.168	0.469	0.799	8.676			
STA AV	P	2.83	3.42	3.28	2.41	3.39	4.20	4.58	4.09	2.72	2.69	2.50	3.06	39.17			
	Q	0.868	1.187	1.324	0.909	0.818	0.608	0.562	0.400	0.271	0.342	0.470	0.726	8.484			
ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																	
		Maximum Discharge Rate		1 Hour		2 Hours		Maximum Volume for Selected Time Interval									
		Date	Rate	Date	Vol.	Date	Vol.	Date	6 Hours Vol.	Date	12 Hours Vol.	Date	1 Day Vol.	Date	2 Days Vol.	Date	8 Days Vol.
1970		7-23	0.661	7-23	0.491	7-23	0.877	7-23	1.405	7-23	1.521	7-23	1.595	7-23	1.670	7-21	1.757
MAXIMUMS FOR PERIOD OF RECORD																	
		7-23	0.661	7-23	0.491	7-23	0.877	7-23	1.405	7-23	1.521	7-23	1.595	5-5	2.090	4-30	2.860
		1970		1970		1970		1970		1970		1970		1958		1958	

NOTES: Watershed conditions: Mixed cover, farm woods, mixture of hardwoods and conifers, 57%; permanent pasture, usually a good cover of native grass and clover mixture, 13%; alfalfa and other hay crops, 5%; cultivated, 9%; roads, 1%; idle, 15%. For topographic map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1964, USDA Misc. Pub. 1194, p. 13.11-6. Precipitation: Thiessen weighted from R-1 and R-2. Station averages determined from continuous records from April 1958 through 1970. For long-time precipitation records, see National Weather Service records at Emporia (1 mile WNW), Virginia.

1970	DAILY PRECIPITATION (inches)					BLACKSBURG, VIRGINIA ROCKY RUN BRANCH WATERSHED (13011)							
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
1	0.02	0.0	0.0	0.46	0.0	0.0	0.0	0.0	0.0	0.0	0.06	0.0	
2	0.0	0.41	0.02	0.32	0.0	0.0	0.87	0.0	0.0	0.0	0.0	0.0	
3	0.0	0.51	0.0	0.0	0.45	0.0	0.0	0.16E	0.0	0.0	0.07	0.0	
4	0.0	0.0	0.58	0.0	0.71	0.0	0.34	0.0	0.14	0.0	0.10	0.0	
5	0.0	0.0	0.02	0.0	0.0	0.80	0.14	0.0	0.0	0.0	0.0	0.0	
6	0.38E	0.0	0.0	0.22	0.0	0.51	0.0	0.0	0.0	0.0	0.0	0.0	
7	0.12E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.01E	0.0	0.0	0.0	0.0	
9	0.0	0.57	0.0	0.07	0.0	0.0	0.35	1.19E	0.0	0.0	0.0	0.0	
10	0.0	0.01	0.0	0.0	0.0	0.0	1.70	1.10E	0.0	0.0	0.50	0.0	
11	0.0	0.0	0.0	0.0	0.06	0.0	0.0	0.0	0.03	0.0	0.39	0.0	
12	0.4E	0.0	0.64	0.0	0.01	0.0	0.0	0.0	0.0	0.0	0.69	0.07	
13	0.0	0.0	0.09	0.27	0.0	0.0	0.0	0.0	0.0	0.0	0.05	0.0	
14	0.0	0.0	0.0	0.23	0.0	0.0	0.0	0.0	0.0	0.0	0.18	0.0	
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.06	0.14	0.0	
16	0.0	0.76	0.0	0.0	0.0	0.02	0.0	0.0	0.0	0.18	0.0	1.14	
17	0.38E	0.59E	0.0	0.0	0.44	0.0	0.0	0.0	0.0	0.0	0.0	0.01	
18	0.02E	0.0	0.49	0.0	0.0	0.0	0.0	0.0	0.04	0.0	0.0	0.0	
19	0.02E	0.0	0.0	0.0	0.0	0.00	0.0	1.25	0.0	0.0	0.0	0.0	
20	0.05E	0.0	0.25	0.04	0.0	0.42	0.09	0.16	0.0	0.07	0.15	0.0	
21	0.0	0.0	0.04	0.0	0.0	0.25	0.52	0.0	0.0	0.72	0.0	0.75	
22	0.0	0.0	0.48	0.0	0.0	0.56	0.28	0.0	0.0	0.41	0.0	0.03	
23	0.0	0.0	0.06	0.07	0.0	0.03	4.70	0.45	0.0	0.15	0.0	0.21	
24	0.0	0.0	0.0	0.0	0.0	0.0	0.04	0.0	0.0	0.0	0.0	0.0	
25	0.0	0.22	0.0	0.0	0.0	0.95	0.0	0.0	0.0	0.01	0.0	0.01	
26	0.0	0.0	0.41	0.84	0.98	0.08	0.0	0.0	0.0	0.0	0.0	0.0	
27	0.0	0.0	0.0	0.04	0.01	0.0	0.0	0.0	0.30	0.0	0.0	0.0	
28	0.0	0.0	0.0	0.08	0.0	0.0	0.0	0.0	0.07	0.0	0.0	0.0	
29	0.36		0.48	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
30	0.0		0.15	0.0	0.0	0.0	0.12	0.0	0.0	1.52	0.0	0.0	
31	0.0		0.55		0.0		0.62	0.0		0.13		0.64S	
TOTAL	1.39	3.08	4.27	2.63	2.66	3.63	9.78	4.32	0.58	3.24	2.33	2.86	
STA AV	2.83	3.42	3.28	2.41	3.39	4.20	4.58	4.09	2.72	2.69	2.50	3.06	

NOTES: Precipitation amounts are Thiessen weighted values from rain gages R-1 and R-2. STA AV based on record period April 1958 through 1970.

1970	MEAN DAILY DISCHARGE (cfs)					BLACKSBURG, VIRGINIA ROCKY RUN BRANCH WATERSHED (13011)						
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.498	0.375	0.475	1.849	0.441	0.225	0.149	0.361	0.172	0.095	0.197	0.256
2	0.470	0.556	0.461	3.357	0.414	0.221	0.329	0.272	0.165	0.093	0.190	0.246
3	0.456	1.238	0.459	1.695	0.490	0.212	0.301	0.243E	0.164	0.085	0.182	0.246
4	0.401	0.788	0.569	1.248	1.057	0.199	0.193	0.213E	0.164	0.063	0.172	0.246
5	0.375	0.623	0.836	1.079	0.851	0.252	0.190	0.213E	0.167	0.068	0.177	0.235
6	0.410	0.566	0.595	1.042	0.585	0.603	0.180	0.213E	0.151	0.069	0.168	0.239
7	0.550	0.523	0.548	0.953	0.502	0.253	0.166	0.213E	0.148	0.069	0.168	0.246
8	0.480	0.498	0.535	0.867	0.463	0.228	0.153	0.213E	0.140	0.069	0.168	0.246
9	0.411	0.548	0.498	0.808	0.420	0.223	0.184	0.431E	0.137	0.069	0.168	0.246
10	0.375	1.021	0.478	0.744	0.361	0.216	2.178	2.309	0.129	0.070	0.196	0.246
11	0.375	0.672	0.459	0.685	0.360	0.200	0.587	1.355	0.133	0.071	0.388	0.246
12	0.397	0.570	0.545	0.649	0.352	0.195	0.309	0.628	0.121	0.070	0.352	0.231
13	0.381	0.526	1.059	0.675	0.343	0.179	0.247	0.441	0.113	0.074	0.665	0.208
14	0.375	0.498	0.703	1.027	0.319	0.176	0.224	0.345	0.113	0.075	0.408	0.199
15	0.375	0.492	0.613	0.759	0.319	0.165	0.217	0.288	0.108	0.099	0.654	0.190
16	0.375	0.572	0.559	0.675	0.309	0.174	0.206	0.259	0.106	0.141	1.018	0.608
17	0.397	2.514	0.525	0.649	0.405	0.163	0.177	0.255	0.097	0.133	0.713	0.773
18	0.603	1.638	0.814	0.624	0.348	0.148	0.177	0.231	0.097	0.138	0.590	0.659
19	0.467	1.132	0.735	0.599	0.310	0.133	0.164	0.254	0.097	0.133	0.526	0.610
20	0.441	0.819	0.784	0.575	0.287	0.207	0.173	1.642	0.103	0.143	0.485	0.464
21	0.391	0.699	0.779	0.527	0.280	0.214	0.255	0.446	0.096	0.213	0.458	0.854
22	0.375	0.649	1.524	0.498	0.274	0.281E	0.279	0.338	0.094	0.165	0.420	1.510
23	0.375	0.619	1.089	0.487	0.260	0.177	34.104	0.369	0.090	0.209	0.390	1.881
24	0.375	0.565	0.856	0.483	0.248	0.163	4.492	0.339	0.086	0.146	0.328	1.963
25	0.375	0.569	0.727	0.459	0.245	0.400E	0.922	0.277	0.084	0.146	0.308	1.741
26	0.375	0.571	0.839	0.707	0.480	0.337E	0.545	0.242	0.081	0.146	0.308	0.964
27	0.355	0.548	0.908	0.840	0.296	0.168	0.421	0.227	0.096	0.137	0.308	0.677
28	0.336	0.512	0.730	0.616	0.252	0.165	0.349	0.216	0.112	0.123	0.293	0.619
29	0.386		1.243	0.543	0.242	0.175	0.313	0.193	0.096	0.123	0.274	0.563
30	0.459		0.933	0.473	0.232	0.161	0.306	0.184	0.095	0.375	0.274	0.519
31	0.382		2.614		0.233		0.404	0.181		0.303		0.712
MEAN	0.4128	0.7465	0.7900	0.8731	0.3863	0.2204	1.5772	0.4319	0.1185	0.1263	0.3649	0.6013
INCHES	0.549	0.896	1.050	1.123	0.514	0.284	2.097	0.574	0.152	0.168	0.469	0.799
STA AV	0.868	1.187	1.324	0.909	0.818	0.608	0.562	0.400	0.271	0.342	0.470	0.726

NOTES: To convert CFS to IN/DAY, multiply by 0.042886. STA AV based on record period April 1958 through 1970.

1970	SELECTED RUNOFF EVENT					BLACKSBURG, VIRGINIA ROCKY RUN BRANCH WATERSHED (13011)						
ANTECEDENT CONDITIONS			RAINFALL				RUNOFF					
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.		
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)		
EVENT OF JULY 23 - 24, 1970												
RG P27R02												
7-23	0.0	0.010	7-23	1440	0.0	0.0	7-23	1615	0.582	0.0		
				1500	0.6900	0.23		1616	0.632	0.0		
				1628	0.0	0.23		1619	0.912	0.0001		
				1637	2.2667	0.57		1621	1.757	0.0002		
				1642	2.9996	0.82		1622	2.261	0.0003		
WATERSHED CONDITIONS:												
Mixed cover, farm woods,												
mixture of hardwoods and												
conifers, 57%; permanent												
pasture, usually a good												
cover of native grass and												
clover mixture, 13%; alfalfa												
and other hay crops, 5%;												
cultivated, 9%; roads, 1%;												
idle, 15%.												
				1648	2.5002	1.07		1623	2.686	0.0004		
				1654	2.4998	1.32		1625	2.770	0.0006		
				1700	2.4998	1.57		1627	3.307	0.0008		
				1703	2.0006	1.67		1628	3.425	0.0009		
				1707	4.5001	1.97		1631	3.514	0.0012		
				1708	2.9982	2.02		1633	4.415	0.0014		
				1713	3.6001	2.32		1635	5.742	0.0017		
				1718	1.2001	2.42		1636	5.596	0.0019		
				1728	1.8000	2.72		1637	6.514	0.0021		
				1744	0.5625	2.87		1638	7.275	0.0023		
				1750	2.9998	3.17		1639	7.538	0.0025		
				1753	2.0000	3.27		1640	7.986	0.0027		
				1809	0.4500	3.39		1641	8.624	0.0029		
				1813	1.2000	3.47		1642	10.694	0.0032		
				1830	0.1765	3.52		1643	15.222	0.0036		
				1850	0.1500	3.57		1644	23.846	0.0041		
				1925	0.1714	3.67		1645	34.825	0.0051		
				1950	0.0720	3.70		1647	47.288	0.0074		
				2000	0.1800	3.73		1648	49.264	0.0087		
				2020	0.0900	3.76		1650	58.067	0.0121		
				2040	0.0900	3.79		1651	66.260	0.0138		
								1652	80.183	0.0158		
								1653	93.474	0.0188		
								1654	102.725	0.0215		
								1655	105.377	0.0244		
								1657	109.132	0.0311		
								1658	125.059	0.0344		
								1659	145.374	0.0382		
								1700	155.363	0.0434		
								1701	171.329	0.0480		

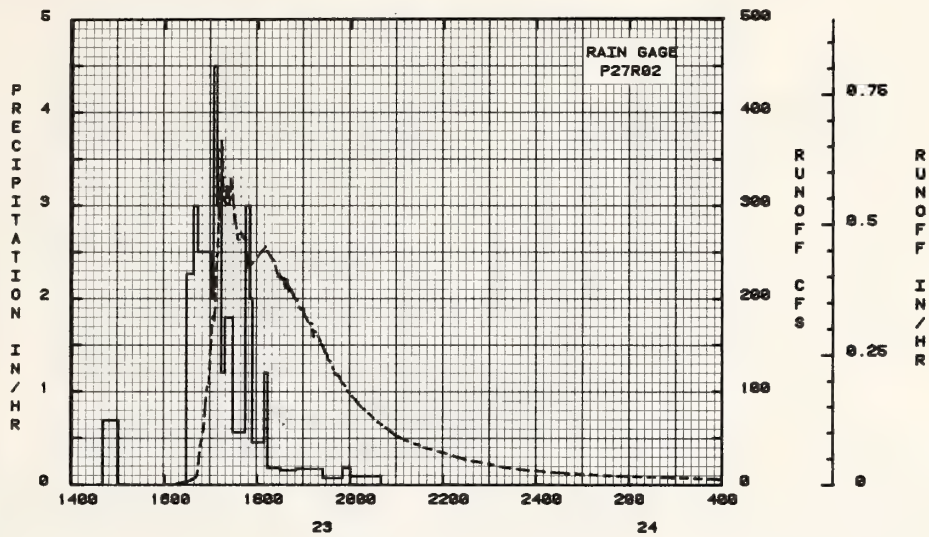
NOTES: To convert CFS to IN/HR, multiply by 0.0017869.

1970	SELECTED RUNOFF EVENT			BLACKSBURG, VIRGINIA			ROCKY RUN BRANCH WATERSHED (13011)			
ANTECEDENT CONDITIONS			RAINFALL			RUNOFF				
Date	Fainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)
EVENT OF JULY 23 - 24, 1970 (CONTINUED)										
							7-23	1702	160.725	0.0529
								1703	179.746	0.0579
								1704	176.651	0.0641
								1705	190.440	0.0692
								1706	223.542	0.0750
								1707	246.073	0.0816
								1708	249.089	0.0902
								1709	272.844	0.0975
								1710	302.746	0.1055
								1711	284.183	0.1137
								1712	311.771	0.1241
								1713	369.850	0.1336
								1714	345.057	0.1436
								1715	322.981	0.1553
								1716	306.652	0.1641
								1717	306.438	0.1727
								1718	303.277	0.1812
								1719	301.257	0.1917
								1720	320.508	0.2004
								1721	320.233	0.2093
								1722	309.019	0.2181
								1723	300.971	0.2287
								1724	307.833	0.2372
								1725	328.270	0.2461
								1726	325.797	0.2552
								1728	306.881	0.2751
								1729	297.592	0.2835
								1731	282.979	0.3017
								1734	264.081	0.3265
								1735	262.910	0.3339
								1738	270.881	0.3581
								1742	264.361	0.3899
								1744	263.481	0.4046
								1747	236.581	0.4273
								1748	232.765	0.4339
								1810	255.704	0.5941
								1812	250.863	0.6100
								1816	245.161	0.6394
								1818	243.431	0.6530
								1821	240.090	0.6749
								1823	234.651	0.6898
								1825	227.269	0.7027
								1826	223.100	0.7090
								1828	226.441	0.7231
								1830	223.285	0.7372
								1831	220.386	0.7434
								1834	221.757	0.7635
								1835	213.212	0.7696
								1836	211.645	0.7755
								1837	220.414	0.7815
								1838	219.496	0.7892
								1839	213.206	0.7952
								1840	208.225	0.8011
								1841	212.294	0.8070
								1842	209.585	0.8144
								1844	206.339	0.8260
								1845	207.173	0.8332
								1846	201.678	0.8389
								1849	199.199	0.8571
								1851	197.945	0.8682
								1854	189.545	0.8858
								1856	188.051	0.8963
								1858	188.935	0.9081
								1901	180.846	0.9249
								1903	178.095	0.9345
								1905	175.510	0.9460
								1908	173.002	0.9618
								1910	172.600	0.9714
								1911	166.086	0.9761
								1912	158.777	0.9818
								1913	164.060	0.9863
								1915	164.491	0.9966
								1918	159.538	1.0102
								1921	154.311	1.0244
								1922	150.629	1.0287

NOTES: To convert CFS to IN/HR, multiply by 0.0017869.

1970 SELECTED RUNOFF EVENT BLACKSBURG, VIRGINIA ROCKY RUN BRANCH WATERSHED (13011)											
ANTECEDENT CONDITIONS			RAINFALL			RUNOFF					
Date	Rainfall	Rnoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.	
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)	
EVENT OF JULY 23 - 24, 1970 (CONTINUED)											
							7-23	1924	149.151	1.0381	
								1925	147.842	1.0422	
								1926	144.540	1.0463	
								1927	142.178	1.0513	
								1929	140.718	1.0592	
								1930	137.186	1.0640	
								1931	134.064	1.0678	
								1933	132.833	1.0753	
								1934	132.413	1.0799	
								1937	125.569	1.0907	
								1938	123.739	1.0951	
								1940	119.836	1.1019	
								1941	117.935	1.1052	
								1944	117.029	1.1159	
								1947	113.430	1.1264	
								1949	109.871	1.1334	
								1953	106.374	1.1462	
								1956	100.755	1.1549	
								1959	98.080	1.1639	
								2002	94.454	1.1726	
								2006	91.376	1.1836	
								2008	88.768	1.1893	
								2014	83.199	1.2043	
								2017	80.916	1.2117	
								2019	80.138	1.2168	
								2024	76.120	1.2283	
								2030	71.565	1.2417	
								2036	67.211	1.2538	
								2041	64.385	1.2634	
								2046	60.926	1.2730	
								2049	58.912	1.2784	
								2051	57.675	1.2817	
								2058	52.974	1.2933	
								2102	51.458	1.2995	
								2106	49.499	1.3055	
								2110	48.201	1.3113	
								2115	46.398	1.3186	
								2124	43.460	1.3305	
								2130	41.949	1.3383	
								2136	39.739	1.3454	
								2156	35.217	1.3676	
								2219	28.989	1.3898	
								2229	26.633	1.3980	
								2243	24.439	1.4087	
								2250	23.722	1.4137	
								2301	21.641	1.4211	
								2305	20.958	1.4236	
								2318	18.507	1.4312	
								2351	15.227	1.4478	
								2400	14.656	1.4519	
							7-24	11	13.688	1.4565	
								28	12.759	1.4632	
								43	11.830	1.4687	
								101	10.907	1.4748	
								148	9.038	1.4887	
								216	8.585	1.4961	
								258	7.247	1.5060	
								348	6.206	1.5160	

NOTES: To convert CFS to IS/HR, multiply by 0.0017869.



EVENT OF JULY 23 - 24, 1970
BLACKSBURG, VIRGINIA ROCKY RUN BRANCH WATERSHED (13011)

BLACKSBURG VIRGINIA CHESTNUT BRANCH WATERSHED (13015)

LOCATION: Bedford County, Va., on Route No. 460, about 6 mi. west of Forest, Va., near Goode, Va., Elk Creek, Big Otter River.

AREA: 1058.00 acres 1.65 sq. miles

MONTHLY PRECIPITATION AND RUNOFF (inches)															BLACKSBURG VIRGINIA CHESTNUT BRANCH WATERSHED (13015)																
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual																	
1970	P	1.30	3.05	2.07	3.27	2.27	0.77	4.75	4.87	0.66	5.96	3.59	2.46	35.01																	
	Q	0.639	1.044	0.676	1.243	0.359	0.109	0.234	0.285	0.072	0.769	0.783	0.470	6.684																	
STA AV	P	2.41	3.31	3.38	2.34	3.12	2.63	3.52	3.92	3.05	3.12	2.94	3.16	36.90																	
	Q	0.887	1.211	1.311	0.754	0.459	0.358	0.236	0.494	0.227	0.439	0.541	0.691	7.609																	
ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																															
		Maximum Discharge		1 Hour		2 Hours		Maximum Volume for Selected Time Interval												2 Days		8 Days									
		Date	Rate	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.												
1970		7-14	0.318	7-14	0.120	10-31	0.152	10-31	0.397	10-31	0.608	10-30	0.675	10-30	0.711	10-30	0.949														
MAXIMUMS FOR PERIOD OF RECORD																															
		8-23	0.390	8-23	0.330	8-24	0.550	8-24	1.030	8-23	1.630	8-23	2.260	8-22	2.420	8-20	2.800														
		1967		1967		1967		1967		1967		1967		1967		1967															

NOTES: Watershed conditions: Mixed cover, cultivated, 30%; permanent pasture, usually a good cover of native grass mixture, 26%; farm woods, a mixture of hardwoods and pine, 37%; roads, 1%; idle, 6%. For topographic map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1968, USDA Misc. Pub. 1330, p. 13.015-4. For drainage pattern map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1960-61, USDA Misc. Pub. 994, p. 13.15-5. Precipitation: Thiessen weighted from R-1, R-2 and R-3. STA AV determined from continuous records from September 1960 through 1970. For long-time precipitation records, see National Weather Service records at Bedford, Virginia.

1970 DAILY PRECIPITATION (inches)													BLACKSBURG VIRGINIA CHESTNUT BRANCH WATERSHED (13015)												
	Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec												
	1	0.0	0.0	0.0	0.48	0.0	0.03E	0.0	0.06E	0.0	0.0	0.17E	0.0												
	2	0.0	0.89	0.0	0.88	0.01	0.03E	0.29	0.0	0.0	0.0	0.33E	0.0												
	3	0.0	0.21	0.0	0.0	0.59	0.0	0.0	0.61E	0.0	0.0	0.29E	0.0												
	4	0.0	0.0	0.06E	0.0	0.61E	0.03E	0.05E	0.0	0.06E	0.0	0.67E	0.0												
	5	0.0	0.0	0.0	0.0	0.0	0.14E	0.05E	0.0	0.0	0.0	0.0	0.0												
	6	0.20S	0.0	0.0	0.17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0												
	7	0.08S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0												
	8	0.0	0.02	0.0	0.0	0.0	0.0	0.0	0.51	0.0	0.0	0.0	0.0												
	9	0.0	0.83	0.0	0.01	0.0	0.0	0.19	0.92E	0.08	0.0	0.0	0.0												
	10	0.0	0.01	0.0	0.0	0.01	0.0	0.03	2.02E	0.33	0.0	0.52	0.0												
	11	0.03S	0.0	0.0	0.0	0.06	0.0	0.0	0.0	0.0	0.06	0.61	0.0												
	12	0.05S	0.0	0.33	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.06	0.44												
	13	0.0	0.0	0.0	0.50E	0.0	0.0	0.0	0.0	0.0	0.0	0.01	0.0												
	14	0.0	0.28S	0.0	0.03E	0.0	0.0	1.85H	0.0	0.0	0.01	0.44	0.0												
	15	0.0	0.17S	0.0	0.0	0.0	0.39	0.0	0.0	0.0	0.18	0.07	0.0												
	16	0.0	0.23	0.0	0.0	0.08	0.08	0.0	0.0	0.0	0.0	0.0	0.71S												
	17	0.65	0.37	0.0	0.0	0.91	0.0	0.0	0.0	0.0	0.0	0.0	0.01S												
	18	0.97S	0.05E	0.62	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0												
	19	0.06S	0.0	0.0	0.0	0.0	0.0	0.10	0.05E	0.0	0.0	0.0	0.0												
	20	0.05S	0.0	0.06	0.0	0.0	0.0	0.17	0.0	0.0	0.26	0.42	0.0												
	21	0.0	0.0	0.06E	0.0	0.0	0.0	0.11	0.07	0.0	1.59	0.0	0.75												
	22	0.0	0.0	0.22E	0.0	0.0	0.0	0.25	0.23E	0.0	0.0	0.0	0.04												
	23	0.03S	0.0	0.03E	0.0	0.0	0.0	0.11	0.09E	0.0	0.0	0.0	0.05												
	24	0.0	0.0	0.0	0.30	0.0	0.0	0.19	0.0	0.0	0.05	0.0	0.01												
	25	0.0	0.0	0.0	0.0	0.0	0.08E	0.01	0.0	0.0	0.0	0.0	0.0												
	26	0.0	0.0	0.02E	0.78	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0												
	27	0.0	0.0	0.0	0.0	0.0	0.0	0.33	0.0	0.18	0.0	0.0	0.0												
	28	0.0	0.0	0.0	0.12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0												
	29	0.38		0.34	0.0	0.0	0.0	0.0	0.0	0.0	0.51	0.0	0.0												
	30	0.0		0.25	0.0	0.0	0.0	0.29	0.0	0.0	2.76	0.0	0.0												
	31	0.0		0.09		0.0		0.73	0.32		0.53H		0.45E												
TOTAL		1.30	3.05	2.07	3.27	2.27	0.77	4.75	4.87	0.66	5.96	3.59	2.46												
STA AV		2.41	3.31	3.38	2.34	3.12	2.63	3.52	3.92	3.05	3.12	2.94	3.16												

NOTES: Precipitation amounts are Thiessen weighted values from rain gages R-1, R-2, and R-3. STA AV based on record period September 1960 through 1970.

1970 MEAN DAILY DISCHARGE (cfs) BLACKSBURG VIRGINIA CHESTNUT BRANCH WATERSHED (13015)												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	3.228	0.555	0.896	1.147	0.533E	0.256	0.079	0.223	0.177	0.096	1.643	0.459
2	1.793	3.063	0.896	14.496	0.522E	0.240	0.082	0.143	0.152	0.102	0.968	0.459
3	1.346	2.811	0.896	6.326E	0.345E	0.221	0.113	0.350	0.142	0.096	2.777	0.459
4	1.033	1.589	0.959	3.057E	2.382E	0.212	0.081	0.208	0.135	0.096	3.703	0.425
5	0.923	1.187	0.880	2.809E	1.819E	0.225	0.066	0.128	0.129	0.096	1.725	0.422
6	0.868	1.046	0.808	3.174E	0.975E	0.227	0.062	0.127	0.126	0.096	0.987	0.434
7	0.813	0.962	0.846	2.240E	0.678E	0.198	0.061	0.125	0.111	0.096	0.774	0.435
8	0.779	0.896	0.880	2.004E	0.635E	0.184	0.074	0.186	0.108	0.096	0.634	0.459
9	0.779	3.490	0.686	1.525E	0.592E	0.184	0.097	0.389	0.122	0.096	0.560	0.459
10	0.722	2.480	0.661	0.782E	0.555E	0.176	0.109	5.332	0.165	0.096	0.751	0.459
11	0.568	1.631	0.704	0.837E	0.559E	0.163	0.077	0.995	0.156	0.096	3.457	0.459
12	0.584	1.288	1.093	1.191E	0.610E	0.156	0.061	0.468	0.112	0.096	1.821	0.659
13	0.524	1.072	1.069	1.518E	0.482E	0.139	0.053	0.347	0.114	0.096	1.246E	0.440
14	0.498	0.988	0.792	2.883E	0.331E	0.139	6.197	0.301	0.098	0.096	1.119	0.396
15	0.461	1.047	0.779	0.537E	0.303E	0.235	0.310	0.268	0.094	0.096	2.055	0.373
16	0.469	2.219	0.779	0.407E	0.390E	0.209	0.146	0.246	0.087	0.096	1.420E	1.079
17	1.314	4.439	0.779	0.603E	0.719E	0.182	0.115	0.229	0.087	0.096	0.970E	0.982
18	1.908	3.118	2.126	0.832E	0.385E	0.155	0.110	0.199	0.087	0.104	0.693E	0.696
19	1.310	2.253	1.877	0.938E	0.260E	0.129	0.110	0.205	0.084	0.107	0.549E	0.630
20	1.007	1.671	2.039E	0.907E	0.224E	0.122	0.133	0.199	0.092	0.107	1.019E	0.572
21	0.868	1.353	1.355E	0.803E	0.224E	0.103	0.163	0.197	0.097	0.160	0.849	1.848
22	0.867	1.308	1.212E	0.779E	0.224E	0.099	0.201	0.271	0.091	0.203	0.752	1.653
23	0.688	1.143	0.821	0.765E	0.241E	0.111	0.138	0.241	0.074	0.181	0.657	1.160
24	0.594	1.091	0.750	0.823E	0.231E	0.136	0.179	0.204	0.073	0.171	0.565	0.952
25	0.719	1.047	0.693	0.911E	0.237E	0.129	0.154	0.180	0.070	0.171	0.555	0.838
26	0.663	0.884	0.661	1.097E	0.268E	0.135	0.127	0.172	0.072	0.171	0.555	0.693
27	0.587	0.866	0.611	0.392E	0.251	0.114	0.165	0.161	0.075	0.171	0.523	0.661
28	0.608	0.896	0.608	0.437E	0.235	0.102	0.166	0.156	0.089	0.171	0.514	0.588
29	0.680		1.167	0.560E	0.235	0.094	0.122	0.138	0.096	0.175	0.472	0.579
30	0.652		0.876	0.491E	0.245	0.087	0.226	0.128	0.096	0.650	0.471	0.545
31	0.549		0.840		0.261		0.641	0.169		30.020		0.607
MEAN	0.9163	1.6568	0.9690	1.8423	0.5145	0.1620	0.3360	0.4092	0.1070	1.1032	1.1595	0.6736
INCHES	0.639	1.044	0.676	1.243	0.359	0.109	0.234	0.285	0.072	0.769	0.783	0.470
STA AV	0.887	1.211	1.311	0.754	0.459	0.358	0.236	0.494	0.227	0.439	0.541	0.691

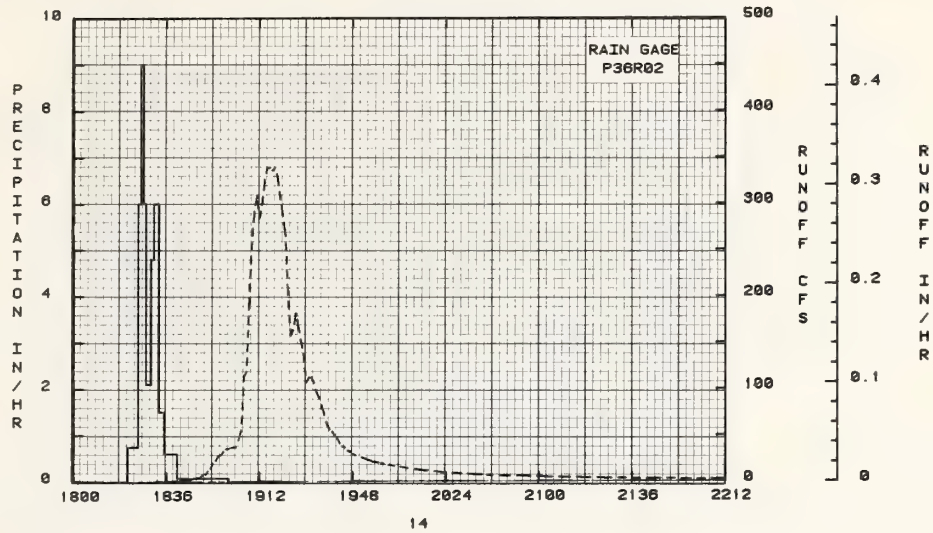
NOTES: To convert CFS to IN/DAY, multiply by 0.022496. STA AV based on record period September 1960 through 1970.

1970			SELECTED RUNOFF EVENT				BLACKSBURG VIRGINIA				CHESTNUT BRANCH WATERSHED (13015)			
ANTECEDENT CONDITIONS			RAINFALL				RUNOFF							
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.				
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)				
EVENT OF JULY 14 - 15, 1970														
RG P36R02			RG P36R02											
7-14	0.0	0.001	7-14	1821	0.0	0.0	7-14	1832	0.096	0.0				
				1825	0.7500	0.05		1834	0.149	0.0				
				1826	6.0015	0.15		1836	0.160	0.0				
				1827	8.9939	0.30		1838	0.320	0.0				
				1828	6.0015	0.40		1839	0.619	0.0				
WATERSHED CONDITIONS: Mixed cover, cultivated, 30%; permanent pasture, usually a good cover of native grass mixture, 26%; farm woods, a mixture of hardwoods and pine, 37%; roads, 1%; idle, 6%.				1830	2.0995	0.47		1840	0.704	0.0				
				1831	4.8012	0.55		1841	0.789	0.0				
				1832	6.0015	0.65		1842	1.173	0.0				
				1833	6.0015	0.75		1843	1.344	0.0				
				1835	1.4997	0.80		1844	1.355	0.0				
				1840	0.6000	0.85		1845	1.910	0.0				
				1850	0.0600	0.86		1846	2.976	0.0				
				1900	0.0600	0.87		1847	3.670	0.0				
								1848	4.075	0.0001				
								1849	5.217	0.0002				
							1850	6.966	0.0003					
							1851	8.268	0.0004					
							1852	11.362	0.0005					
							1853	14.669	0.0007					
							1854	19.587	0.0010					
								1855	22.905	0.0013				
							1856	27.428	0.0017					
							1857	28.836	0.0022					
							1858	32.741	0.0027					
							1859	35.152	0.0032					
								1900	35.813	0.0038				
								1901	36.645	0.0043				
								1903	37.403	0.0054				
								1905	55.880	0.0069				
								1906	114.021	0.0081				
								1907	118.801	0.0098				
								1908	198.620	0.0127				
								1909	258.680	0.0160				
								1910	291.741	0.0200				
								1511	309.121	0.0244				

NOTES: To convert CFS to IN/HR, multiply by 0.0009374.

1970		SELECTED RUNOFF EVENT					BLACKSBURG VIRGINIA CHESTNUT BRANCH WATERSHED (13015)				
ANTECEDENT CONDITIONS			RAINFALL			RUNOFF					
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.	
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)	
EVENT OF JULY 14 - 15, 1970 (CONTINUED)											
							7-14	1912	284.295	0.0298	
								1913	300.340	0.0341	
								1914	326.318	0.0367	
								1915	339.215	0.0448	
								1916	338.948	0.0458	
								1917	336.122	0.0547	
								1918	339.258	0.0556	
								1919	327.469	0.0657	
								1920	305.044	0.0703	
								1921	286.589	0.0746	
								1922	265.231	0.0786	
								1923	201.724	0.0829	
								1924	157.419	0.0855	
								1925	163.436	0.0878	
								1926	181.519	0.0903	
								1927	168.280	0.0935	
								1928	151.744	0.0958	
								1929	136.681	0.0979	
								1930	106.703	0.1001	
								1931	112.400	0.1017	
								1932	112.325	0.1033	
								1933	106.330	0.1049	
								1934	96.888	0.1068	
								1935	89.677	0.1082	
								1936	81.387	0.1095	
								1937	71.775	0.1106	
								1938	62.291	0.1118	
								1939	55.794	0.1127	
								1940	53.565	0.1135	
								1941	49.703	0.1143	
								1942	45.766	0.1152	
								1943	41.126	0.1158	
								1944	37.691	0.1164	
								1945	36.176	0.1171	
								1946	33.402	0.1176	
								1947	31.556	0.1181	
								1948	29.284	0.1185	
								1949	28.377	0.1190	
								1953	24.323	0.1206	
								1955	22.190	0.1213	
								1956	21.315	0.1216	
								1958	19.992	0.1223	
								1959	19.523	0.1226	
								2000	18.584	0.1229	
								2002	17.549	0.1234	
								2004	16.834	0.1240	
								2013	12.588	0.1260	
								2017	11.639	0.1268	
								2024	9.452	0.1280	
								2027	8.695	0.1284	
								2030	8.246	0.1288	
								2038	6.977	0.1297	
								2040	6.668	0.1299	
								2042	6.262	0.1301	
								2046	5.953	0.1305	
								2054	5.569	0.1312	
								2100	5.131	0.1317	
								2105	4.683	0.1321	
								2109	4.374	0.1324	
								2112	4.225	0.1326	
								2120	3.723	0.1331	
								2128	3.243	0.1335	
								2131	3.094	0.1337	
								2147	2.624	0.1344	
								2156	2.379	0.1347	
								2212	2.016	0.1353	
								2236	1.643	0.1360	
								2254	1.483	0.1364	
								2302	1.387	0.1366	
								2318	1.216	0.1369	
								2338	1.045	0.1373	
								2400	0.939	0.1376	
							7-15	56	0.715	0.1383	

NOTES: To convert CFS to IN/HR, multiply by 0.0009374.



EVENT OF JULY 14 - 15, 1970
BLACKSBURG VIRGINIA CHESTNUT BRANCH WATERSHED (13015)

KLINGERSTOWN, PENNSYLVANIA WATERSHED WE-36

LOCATION: Northumberland County, Pennsylvania 6 miles northeast of Klingerstown, Pennsylvania: Mahantango Creek Watershed, Susquehanna River Basin.

AREA: 1773.00 acres 2.77 sq. miles

MONTHLY PRECIPITATION AND RUNOFF (inches)														KLINGERSTOWN, PENNSYLVANIA WATERSHED WE-36									
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual									
1970	P	1.81	2.73	2.84	3.61	2.99	5.29	5.10	2.71	2.00	3.98	4.30	2.19	39.55									
	Q	0.693	4.798	2.785	4.645	1.276	0.671	0.848	0.201	0.109	0.295	2.076	1.536	19.934									
STA AV	P	1.46	1.36	2.69	3.42	3.86	4.61	3.66	3.32	3.57	2.63	4.20	2.32	37.10									
	Q	0.903	2.277	2.300	2.485	1.518	0.958	0.491	0.378	0.542	0.230	1.765	1.372	15.220									
ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																							
		Maximum Discharge		1 Hour		2 Hours		Maximum Volume for Selected Time Interval		6 Hours		12 Hours		2 Days		8 Days							
		Date	Rate	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.						
1970		4- 2	0.102	4- 2	0.100	4- 2	0.194	4- 2	0.567	4- 2	1.020	4- 2	1.721	4- 2	2.401	3-31	3.381						
MAXIMUMS FOR PERIOD OF RECORD																							
		4- 2	0.102	4- 2	0.100	4- 2	0.194	4- 2	0.567	4- 2	1.020	4- 2	1.721	4- 2	2.401	3-31	3.381						
1970				1970		1970		1970		1970		1970		1970		1970							

NOTES: Watershed conditions: Mixed cover area, 4-yr rotation of corn, small grain, small grain and native grasses, most of which is heavily contoured. Vegetative cover: corn, 20.4%; small grain, 20.0%; pasture, 4.0%; hay, 12.9%; vegetables, 0.7%; idle, 0.6%; orchard, 0.5%; homesteads and roads, 3.1%; forest, 37.8%. Precipitation and runoff records began Jan. 1, 1968. Precipitation data Thiessen weighted average for rain gages MB37 and MB37. Length of record 3 yr (1968-70). For long-time precipitation records, see National Weather Service records at Selinsgrove, CAA Airport, Pennsylvania.

1970 DAILY AIR TEMPERATURE (degrees F)													KLINGERSTOWN, PENNSYLVANIA WATERSHED WE-36												
Day	Jan		Feb		Mar		Apr		May		Jun		Jul		Aug		Sep		Oct		Nov		Dec		
	max	min	max	min	max	min	max	min	max	min	max	min	max	min	max	min	max	min	max	min	max	min	max	min	
1	24	13	47	28	39	18	43	28	79	55	80	57	84	60	87	70	70	49	60	40	62	49	45	28	
2	26	12	47	39	40	29	50	34	73	50	84	63	86	68	84	64	72	44	66	43	58	39	62	38	
3	29	14	42	11	35	30	48	34	60	47	80	56	82	67	80	59	74	60	68	48	52	46	58	37	
4	21	8	16	3	32	30	46	29	59	48	61	52	83	63	74	56	82	69	56	37	51	43	52	26	
5	32	8	26	16	39	32	46	27	72	43	69	58	72	59	76	53	60	58	63	35	48	40	35	22	
6	32	22	34	25	37	28	40	29	48	37	62	49	78	54	80	58	75	56	72	48	52	38	34	22	
7	22	11	39	17	40	24	50	35	56	30	70	46	80	52	80	61	76	49	77	48	62	40	30	18	
8	10	-2	32	28	36	22	62	28	78	38	81	50	80	60	80	62	74	56	75	46	60	40	34	14	
9	6	-2	34	31	32	15	69	44	82	55	87	61	70	66	81	64	71	62	68	48	50	46	40	10	
10	21	3	42	31	36	16	49	29	82	48	84	60	77	64	80	62	83	64	70	55	58	47	45	32	
11	22	11	32	25	40	24	48	27	78	61	86	59	77	60	84	58	70	50	66	59	63	56	34	30	
12	24	16	27	17	32	26	55	29	80	58	84	61	80	62	86	59	72	46	70	60	60	54	34	32	
13	26	18	23	10	36	27	57	34	78	60	74	50	76	56	86	60	78	54	72	59	53	46	35	31	
14	22	11	18	4	32	20	46	41	66	54	72	51	75	60	87	62	78	62	72	61	49	42	37	28	
15	6	24	26	18	31	14	64	40	61	53	60	55	79	65	88	65	86	64	68	52	50	39	34	28	
16	32	8	29	16	39	16	66	38	61	50	65	57	79	60	87	65	88	60	51	46	39	32	35	26	
17	43	25	37	12	36	16	64	46	60	50	74	64	80	56	85	64	78	52	47	34	40	29	38	33	
18	38	17	44	21	34	30	57	41	62	50	78	58	83	59	82	56	71	61	62	42	43	28	38	28	
19	17	5	38	20	40	30	46	38	80	46	78	56	82	62	76	64	70	49	61	38	52	32	52	31	
20	16	0	24	16	37	29	66	28	78	56	71	47	80	58	79	66	74	48	54	44	48	39	39	26	
21	12	4	28	13	42	33	62	41	76	45	63	45	72	52	77	56	82	62	60	51	48	33	32	26	
22	16	1	50	20	38	30	67	38	82	56	74	55	75	56	76	51	90	65	64	58	52	36	32	28	
23	24	3	38	23	38	31	55	45	78	60	78	50	73	62	79	60	89	66	62	55	47	17	33	30	
24	20	6	48	20	41	31	59	46	67	56	78	55	82	65	76	56	89	70	58	54	30	17	32	24	
25	33	20	38	6	46	31	69	35	59	55	76	62	84	66	79	56	90	66	62	52	29	17	31	24	
26	40	27	20	2	58	37	71	39	73	48	72	62	83	62	82	56	86	64	58	51	36	27	28	17	
27	30	26	30	17	44	30	71	54	58	41	63	49	88	62	85	60	88	64	50	42	43	37	29	13	
28	38	26	34	20	53	28	70	52	66	40	73	44	86	67	86	63	58	42	54	36	47	40	29	18	
29	44	36			40	19	74	54	70	46	72	48	85	66	85	67	52	40	52	40	45	40	28	18	
30	37	18			34	16	73	57	68	47	85	61	84	69	82	62	53	43	50	47	50	33	28	17	
31	35	14			42	28			74	53			83	72	74	58			52	46			32	14	
AV.	26	13	34	18	39	25	58	38	70	50	74	55	80	62	81	60	76	56	62	48	49	37	37	25	
MEAN	19.4		26.0		32.2		48.1		59.7		64.6		70.8		71.0		66.0		54.9		43.4		31.2		
STA AV	29	16	33	19	44	28	60	40	67	49	76	57	81	62	80	59	74	54	61	45	48	35	34	23	

NOTES: Temperature data taken daily with maximum and minimum thermometers, except on weekends and holidays, when data taken from hygrothermograph charts. The recording period is from 0930 for the date shown to 0930 the following day. Data recorded at MB37 meteorological station. STA AV based on 3 yr (1968-70) record period.

1970 DAILY PRECIPITATION (inches) KLINGERSTOWN, PENNSYLVANIA WATERSHED WE-38												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.0	0.34	0.0	0.18	0.0	0.0	0.78	0.11	0.0	0.0	0.01	0.0
2	0.0	0.68	0.0	1.68	0.70	0.16	0.42	0.05	0.0	0.08	0.0	0.0
3	0.0	0.12	0.0	0.0	0.25	0.33	0.05	0.0	0.15	0.22	0.55	0.26
4	0.0	0.0	0.22	0.0	0.0	0.02	0.0	0.0	0.05	0.0	0.0	0.09
5	0.0	0.10	0.03	0.0	0.0	0.20	0.0	0.0	0.0	0.0	0.10	0.0
6	0.0	0.0	0.0	0.0	0.0	1.16	0.0	0.0	0.0	0.15	0.0	0.0
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8	0.0	0.07N	0.0	0.0	0.05	0.45	0.21	0.05	0.0	0.0	0.0	0.0
9	0.0	0.58N	0.0	0.05	0.0	0.0	1.55	0.0	0.07	0.0	0.0	0.0
10	0.0	0.39N	0.0	0.0	0.0	0.0	0.08	0.0	0.19	0.0	0.17	0.0
11	0.0	0.10N	0.0	0.0	0.19	0.0	0.0	0.0	0.04	0.0	0.27	0.35
12	0.0	0.0	0.49M	0.0	0.0	0.29	0.0	0.0	0.0	0.0	0.90	0.39
13	0.48E	0.09	0.01M	0.0	0.0	0.0	0.0	0.05	0.0	0.0	0.03	0.0
14	1.03E	0.16S	0.0	0.29	0.15	0.0	0.0	0.0	0.0	1.13	0.16	0.0
15	0.0	0.06S	0.0	0.17	0.0	0.35	0.22	0.0	0.0	0.41	0.67	0.0
16	0.0	0.0	0.0	0.0	0.57	0.05	0.18	0.0	0.0	0.0	0.0	0.37M
17	0.0	0.0	0.0	0.0	0.83	0.0	0.0	0.0	0.0	0.0	0.0	0.09M
18	0.0	0.0	0.20N	0.0	0.0	1.34	0.0	0.0	0.25	0.0	0.0	0.0
19	0.05	0.0	0.0	0.0	0.05	0.0	0.31	0.15	0.0	0.0	0.0	0.0
20	0.05	0.0	0.20	0.55	0.0	0.0	0.65	0.05	0.0	0.0	1.05	0.0
21	0.0	0.0	0.0	0.0	0.0	0.25	0.0	0.15	0.0	0.84	0.0	0.14M
22	0.0	0.0	0.40	0.0	0.05	0.0	0.0	0.09	0.0	0.60	0.0	0.16M
23	0.0	0.0	0.0	0.33	0.0	0.0	0.0	1.41	0.0	0.0	0.0	0.14
24	0.0	0.0	0.10	0.37	0.10	0.0	0.05	0.0	0.0	0.0	0.0	0.0
25	0.0	0.05	0.0	0.0	0.0	0.0	0.10	0.0	0.05	0.0	0.0	0.14S
26	0.05	0.0	0.35	0.0	0.0	0.45	0.0	0.0	0.18	0.0	0.0	0.01S
27	0.05	0.0	0.0	0.0	0.0	0.20	0.05	0.0	0.96	0.0	0.0	0.0
28	0.05S	0.0	0.09	0.0	0.0	0.0	0.0	0.0	0.02	0.0	0.0	0.05S
29	0.05	0.0	0.62	0.0	0.0	0.05	0.0	0.0	0.0	0.0	0.40	0.0
30	0.0	0.0	0.0	0.0	0.0	0.0	0.05	0.35	0.05	0.35	0.0	0.0
31	0.0	0.0	0.14N	0.0	0.0	0.0	0.40	0.25	0.0	0.19	0.0	0.0
TOTAL	1.81	2.73	2.84	3.61	2.99	5.29	5.10	2.71	2.00	3.58	4.30	2.19
STA AV	1.46	1.36	2.69	3.42	3.86	4.61	3.66	3.32	3.57	2.63	4.20	2.32

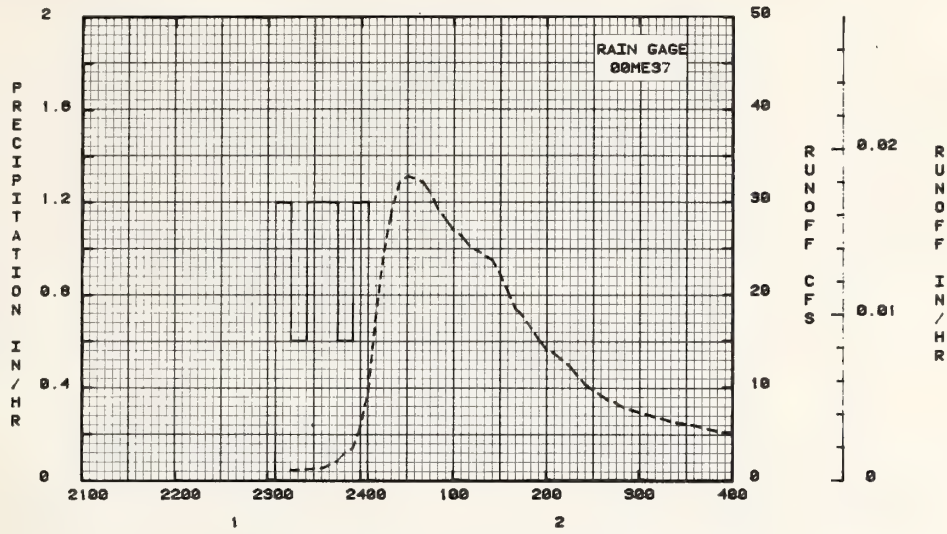
NOTES: Precipitation values are Thiessen weighted average of rain gages MB37 and ME37. STA AV based on 3 yr (1968-70) record period.

1970 MEAN DAILY DISCHARGE (cfs) KLINGERSTOWN, PENNSYLVANIA WATERSHED WE-38												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	3.39	2.56	4.26	7.34	3.33	1.09	0.90	0.90	0.29	0.24	0.95	1.84
2	2.97	46.37	4.18	120.16	3.96	1.06	5.50	0.69	0.28	0.23	0.89	1.70
3	2.60	63.86	3.86	58.32	6.10	1.28	2.49	0.62	0.34	0.32	1.93	1.76
4	2.09	31.24	4.16	24.33	4.97	1.11	1.80	0.55	0.34	0.20	2.96	2.67
5	1.91	15.38	5.07	15.62	4.83	1.14	1.37	0.50	0.27	0.20	3.01	2.11
6	1.94	10.49	5.46	11.91	4.27	4.25	1.11	0.47	0.24	0.25	2.10	2.25
7	1.94	8.20	5.32	9.30	3.85	1.89	0.95	0.47	0.21	0.21	1.66	2.08
8	1.78	6.96	5.18	7.81	3.58	1.83	1.02	0.48	0.22	0.20	1.33	2.01
9	2.02	6.27	4.94	7.04	3.25	1.78	4.67	0.44	0.27	0.20	1.15	2.08
10	1.62	24.79	4.52	5.97	3.01	1.32	9.12	0.41	0.30	0.20	1.16	1.89
11	1.55	25.25	4.12	4.91	2.81	1.15	5.98	0.37	0.25	0.21	1.49	1.88
12	1.52	14.60	4.05	4.23	2.33	1.39	3.88	0.38	0.20	0.19	5.78	4.05
13	1.46	10.66	3.66	3.72	2.03	1.05	2.64	0.37	0.20	0.18	13.53	4.41
14	1.34	7.58	3.23	3.63	1.97	0.93	1.90	0.33	0.21	0.78	8.70	5.03
15	1.28	6.85	2.81	3.71	1.76	1.02	1.83	0.32	0.20	1.86	13.52	4.66
16	1.26	5.68	2.18	3.07	1.98	1.05	1.81	0.31	0.21	0.64	14.49	4.28
17	1.36	5.10	2.06	2.88	6.61	0.92	1.31	0.30	0.24	0.43	8.53	8.59
18	1.39	5.10	2.07	2.34	4.48	4.83	1.12	0.27	0.38	0.38	5.58	10.57
19	1.26	5.49	2.94	2.14	4.21	4.52	1.06	0.35	0.37	0.33	3.95	9.39
20	1.28	4.56	5.20	3.82	3.59	3.04	2.24	0.38	0.31	0.30	9.82	6.84
21	1.15	3.75	7.50	3.18	3.15	2.36	1.69	0.35	0.19	0.89	15.73	5.22
22	1.14	5.35	8.17	2.98	2.99	1.74	1.20	0.27	0.17	1.67	10.11	4.61
23	0.93	7.54	11.53	3.46	2.78	1.36	1.08	2.21	0.16	3.35	6.60	4.16
24	1.05	8.14	12.79	5.12	2.32	1.16	1.01	0.55	0.15	1.83	4.42	3.96
25	1.10	9.12	11.42	5.72	2.07	1.07	0.96	0.44	0.15	1.27	3.29	3.31
26	1.21	6.82	16.68	5.72	2.00	1.24	0.84	0.39	0.15	1.01	2.82	3.05
27	1.10	5.63	19.41	5.23	1.72	1.53	0.76	0.35	0.94	0.87	2.24	2.56
28	1.09	4.72	13.66	4.69	1.49	0.97	0.73	0.32	0.34	0.76	1.97	2.13
29	2.07	11.18	4.10	1.28	0.92	0.70	0.29	0.29	0.26	0.69	2.40	1.91
30	2.75	8.28	3.59	1.19	0.98	0.69	0.33	0.27	0.86	2.54	1.74	1.74
31	2.09	7.56	1.15	1.15	1.15	0.83	0.56	0.56	1.19	1.19	1.72	1.72
MEAN	1.666	12.765	6.692	11.534	3.066	1.665	2.038	0.483	0.271	0.708	5.155	3.692
INCHES	0.693	4.798	2.785	4.645	1.276	0.671	0.848	0.201	0.109	0.295	2.076	1.536
STA AV	0.903	2.277	2.300	2.485	1.518	0.958	0.491	0.378	0.542	0.230	1.765	1.372

NOTES: To convert mean daily discharge in CFS to IN/DAY, multiply by 0.013425. Records are good. Some periods of winter records are affected by ice on control, no adjustments were made for these records. STA AV based on 3 yr (1968-69) record period.

1970 SELECTED RUNOFF EVENT			KLINGERS TOWN, PENNSYLVANIA			WATERSHED WE-38		
ANTECEDENT CONDITIONS			RAINFALL			RUNOFF		
Date Mo-Day	Rainfall (inches)	Runoff (inches)	Date Mo-Day	Time of Day	Intensity (in/hr)	Acc. (inches)	Date Mo-Day	Time of Day
								Rate (cfs)
								Acc. (inches)
EVENT OF JULY 1 - 2, 1970								
RG 00ME37			RG 00ME37					
7- 1	0.0	0.011	7- 1	2305	0.0	0.0	7- 1	2315
				2310	1.2001	0.10		2320
				2315	1.1997	0.20		2325
				2325	0.6001	0.30		2330
				2340	1.2000	0.60		2335
WATERSHED CONDITIONS: Mixed cover area, 4-yr rotation of corn, small grain, small grain and native grasses, most of which is heavily contoured. Vegetative cover: Corn, 20.4%; small grain, 20.0%; pasture, 4.0%; hay, 12.9%; vegetables, 0.7%; idle, 0.6%; orchard, 0.5%; homesteads and roads, 3.1%; forest, 37.8%.				2345	1.1997	0.70	2340	1.664
				2355	0.6001	0.80	2345	2.080
				2400	1.1997	0.90	2350	3.614
			7- 2	5	1.2001	1.00	2355	3.453
				110	0.0	1.00	2400	5.876
							7- 2	5
								10
								15
								20
								25
								30
								40
								45
								50
								55
								100
								105
								110
								125
								130
								135
								140
								145
								150
								155
								200
								205
								210
								215
								220
								225
								230
								235
								240
								245
								250
								255
								300
								305
								310
								320
								325
								335
								340
								345
								350

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.000559.



EVENT OF JULY 1 - 2, 1970
KLINGESTOWN, PENNSYLVANIA WATERSHED WE-38

MCCREDIE, MISSOURI STATION RESERVOIR W-1

LOCATION: Callaway County, Mo.; 1 mi. S.E. of McCredie; Crows Fork Creek, Auxvasse Watershed, Missouri River Basin.

AREA: 153.00 acres

MONTHLY PRECIPITATION AND RUNOFF (inches)														MCCREDIE, MISSOURI STATION RESERVOIR W-1													
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual													
1970	P	0.13	0.39	1.42	7.19	8.17	7.81	1.70	5.18	10.07	3.22	1.17	1.36	47.79													
	Q	0.140	0.0	0.0	3.345	3.827	5.717	0.0	0.157	4.565	0.915	0.296	0.298	19.259													
STA AV	P	1.43	1.56	2.63	3.78	4.32	4.70	3.61	2.85	3.92	3.68	1.92	1.64	36.04													
	Q	0.518	0.653	1.096	1.166	0.938	1.081	0.544	0.134	0.566	1.147	0.395	0.355	8.593													
ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																											
		Maximum Discharge		1 Hour		2 Hours		Maximum Volume for Selected Time Interval										2 Days		8 Days							
		Date	Rate	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.
1970		9-23	1.426	6-13	0.949	6-12	1.543	6-12	2.427	6-12	2.596	6-12	2.640	9-22	3.545	6-12	4.218										
MAXIMUMS FOR PERIOD OF RECORD																											
		10-13	2.269	10-13	1.365	10-13	2.236	10-4	3.960	10-4	7.000	10-4	7.775	10-3	8.050	10-2	8.840										
		1968		1968		1968		1941		1941		1941		1941		1941											

NOTES: Watershed conditions: 58% Pasture and meadow; 2% alfalfa; 20% corn; 1% soybeans; 11% grain sorghum; 2% small grains and 6% roads and farmsteads. Precipitation Thiessen average of 4 recording gages and 1 non-recording gage. Precipitation and runoff records began Jan. 1, 1941. Runoff amounts, or rates, which are reported as inches or inches per hour, respectively, were computed with a constant watershed area of 153 acres, including reservoir surface area. Previous published runoff amounts and rates were computed with a variable watershed area equal to the total area less the reservoir surface area, which was a function of reservoir stage. For topographic map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1963, USDA Misc. Pub. 1164, p. 25.1-13. For long-time precipitation records, see National Weather Service records at Columbia, Missouri

1970 DAILY AIR TEMPERATURE (degrees F)														MCCREDIE, MISSOURI STATION RESERVOIR W-1													
Day		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec														
		max min	max min	max min	max min	max min	max min	max min	max min	max min	max min	max min	max min														
1		24 20	50 33	51 42	41 36	63 48	69 66	92 70	100 75	89 69	79 52	48 31	64 58														
2		25 18	20 16	63 49	51 28	59 37	68 60	93 72	92 70	88 72	79 59	44 34	60 32														
3		27 10	18 5	68 56	52 32	71 40	62 52	92 73	90 72	84 72	79 50	41 32	70 51														
4		38 13	40 10	67 34	48 33	76 64	57 54	88 58	90 70	84 67	71 46	42 32	62 34														
5		17 13	53 26	53 29	57 30	79 50	70 53	78 56	80 70	80 62	80 59	53 32	50 40														
6		15 -4	51 31	57 32	61 42	76 49	76 51	79 54	78 62	89 72	81 63	65 32	44 23														
7		11 2	50 36	60 30	72 37	79 49	78 54	84 62	78 73	90 73	72 60	60 38	48 26														
8		6 -5	49 28	68 33	76 53	80 59	80 58	86 68	86 70	80 66	71 65	63 40	54 32														
9		17 4	33 29	48 29	72 39	81 64	80 57	86 59	85 73	87 62	70 46	50 46	53 36														
10		26 1	47 22	41 29	75 43	78 51	82 63	84 58	83 69	87 54	59 36	58 40	59 36														
11		31 24	44 29	36 27	80 46	81 60	82 64	87 61	81 70	70 47	65 39	57 39	59 29														
12		24 20	40 19	36 26	79 52	81 68	81 62	88 64	84 66	81 58	64 51	51 45	32 28														
13		36 16	38 20	36 23	46 42	82 66	86 64	90 66	85 63	81 54	64 55	50 45	44 27														
14		42 20	37 16	36 22	54 42	82 60	87 68	93 71	86 65	77 54	61 50	49 38	58 29														
15		47 26	29 20	39 20	66 41	67 52	88 66	93 69	91 69	84 65	58 41	38 32	52 34														
16		44 34	37 11	36 24	73 49	64 44	88 66	86 60	91 72	74 58	54 33	52 25	40 34														
17		34 14	61 27	35 28	71 54	76 48	88 72	91 61	83 71	76 64	54 32	55 36	45 35														
18		14 0	61 30	37 36	66 48	60 52	88 70	91 68	91 74	76 63	60 36	52 34	56 36														
19		12 4	33 11	39 34	66 48	80 56	78 62	88 73	91 75	76 56	61 44	50 34	56 30														
20		16 9	34 11	42 31	59 42	82 56	80 60	87 62	90 73	86 63	59 48	49 35	32 24														
21		15 -6	57 24	47 26	64 38	83 59	69 57	77 53	82 65	84 71	67 42	61 34	34 32														
22		28 4	57 40	53 31	81 50	84 60	77 55	78 56	85 71	84 64	66 50	60 30	48 34														
23		34 26	53 26	43 32	80 40	81 60	83 58	80 58	84 66	81 58	60 55	17 16	41 26														
24		54 20	53 31	56 30	68 42	80 62	88 69	87 66	83 64	72 57	64 53	26 11	38 16														
25		55 42	48 21	54 38	70 45	73 63	87 66	89 63	84 66	83 57	65 48	44 24	33 21														
26		44 34	50 14	45 33	79 53	78 54	82 68	91 67	86 65	79 54	66 52	61 40	40 18														
27		51 23	50 30	53 22	82 61	78 55	78 56	92 70	88 65	69 48	65 52	60 38	36 25														
28		66 45	52 30	53 27	86 65	80 63	82 57	92 79	92 68	71 50	54 42	41 35	36 19														
29		56 32		46 25	86 68	80 64	91 66	96 72	92 68	79 53	56 34	56 40	38 20														
30		46 24		50 31	82 62	76 63	90 72	96 77	94 73	79 56	57 41	64 36	40 26														
31		56 32		48 34		82 66		99 74	88 72		46 37		36 30														
AV.		33 17	44 23	48 31	68 45	77 56	80 62	88 65	87 65	81 61	65 47	51 34	47 30														
MEAN		24.7	33.8	39.7	56.8	66.7	70.7	76.6	78.1	70.8	56.0	42.4	38.7														
STA AV		39 20	43 23	52 30	67 43	75 52	83 61	88 65	86 63	81 55	70 45	54 33	41 24														

NOTES: Temperature data taken daily with the maximum and minimum thermometers, except on weekends and holidays, when data taken from hygrothermograph charts. The recording period is from 1700 of the previous day to 1700 of the day on which values are recorded. STA AV based on 30 yr (1941-1970) record period.

1969 DAILY PRECIPITATION (inches) MCCREDIE, MISSOURI STATION RESERVOIR W-1												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.0	0.03	0.29	0.82	0.0	1.04	0.0	0.0	0.0	0.02	0.0	0.0
2	0.01	0.0	0.02	0.0	0.0	0.04	0.0	0.07	1.31	0.0	0.0	0.0
3	0.0	0.0	0.13	0.01	0.0	0.23	0.0	0.0	0.0	0.0	0.0	0.0
4	0.0	0.0	0.0	0.07	0.0	0.03	0.0	0.0	0.02	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.21	0.03	0.0	1.29	0.0	0.0	0.0	0.0
6	0.0	0.0	0.0	0.0	0.01	0.0	0.0	0.62	0.0	0.22	0.0	0.0
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.06	0.40	0.0	0.0	0.0
8	0.0	0.04	0.0	0.0	0.0	0.0	0.0	0.81	0.0	0.30	0.59	0.0
9	0.0	0.0	0.0	0.0	1.07	0.0	0.0	0.62	0.46	0.0	0.05	0.0
10	0.02	0.0	0.0	0.0	0.07	0.0	0.0	0.0	0.0	0.0	0.0	0.15
11	0.0	0.0	0.08	0.0	0.05	0.0	0.0	0.02	0.0	0.0	0.02	0.05
12	0.0	0.0	0.20	0.27	0.0	2.46	0.0	0.0	0.12	0.0	0.0	0.0
13	0.0	0.16	0.0	0.03	0.0	1.38	0.0	0.0	0.85	0.30	0.0	0.0
14	0.0	0.16	0.0	0.0	2.86	0.48	0.0	0.0	0.90	0.0	0.0	0.0
15	0.0	0.0	0.0	0.10	0.49	0.0	0.33	0.0	0.21	0.0	0.0	0.25
16	0.0	0.0	0.02	0.0	0.0	0.71	0.0	0.24	0.0	0.0	0.0	0.37
17	0.10	0.0	0.07	0.0	0.0	0.0	0.0	0.58	0.0	0.0	0.0	0.0
18	0.0	0.0	0.0	2.03	0.0	0.0	0.0	0.23	0.0	0.0	0.0	0.0
19	0.0	0.0	0.20	0.14	0.0	0.11	0.46	0.0	0.0	0.0	0.51	0.0
20	0.0	0.0	0.0	0.0	0.0	1.31	0.0	0.18	0.0	0.0	0.0	0.05
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.43
22	0.0	0.0	0.03	0.08	0.83	0.0	0.0	0.45	2.88	0.72	0.0	0.0
23	0.0	0.0	0.0	0.45	0.0	0.0	0.0	0.0	2.10	0.35	0.0	0.0
24	0.0	0.0	0.0	0.0	0.17	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.13	0.0	0.74	0.0	0.0	0.0	0.73	0.0	0.0	0.0
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.09	0.83	0.0	0.0
27	0.0	0.0	0.0	0.07	0.0	0.0	0.07	0.0	0.0	0.49	0.0	0.0
28	0.0	0.0	0.0	0.0	0.0	0.0	0.10	0.0	0.0	0.0	0.0	0.0
29	0.0	0.0	0.0	0.44	0.62	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	0.0	0.0	0.0	2.66	0.33	0.0	0.0	0.0	0.0	0.0	0.0	0.02
31	0.0	0.0	0.25	0.70	0.0	0.0	0.74	0.0	0.0	0.0	0.0	0.04
TOTAL	0.13	0.39	1.42	7.19	8.17	7.81	1.70	5.18	10.07	3.22	1.17	1.36
STA AV	1.43	1.56	2.63	3.78	4.32	4.70	3.61	2.85	3.92	3.68	1.92	1.64

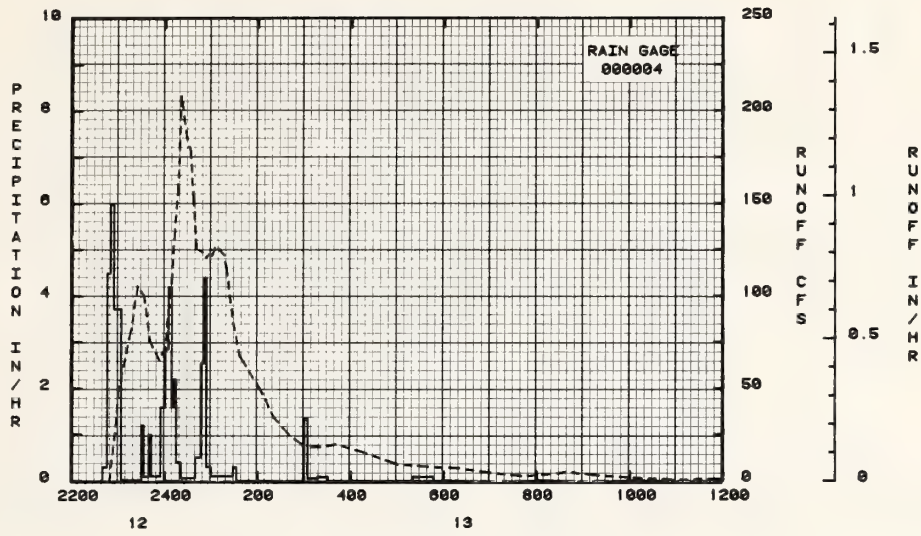
NOTES: Precipitation data are Thiessen weighted values for 4 recording rain gages and 1 non-recording rain gage. STA AV values are for 30 yr (1941-1970) record period.

1970 MEAN DAILY DISCHARGE (cfs) MCCREDIE, MISSOURI STATION RESERVOIR W-1												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.0	0.0	0.0	1.027	1.180	5.645	0.0	0.0	0.0	0.0	0.0	0.0
2	0.0	0.0	0.0	0.517	0.130	1.123	0.0	0.0	0.091	0.0	0.0	0.0
3	0.0	0.0	0.0	0.210	0.982	0.756	0.0	0.0	0.0	0.0	0.0	0.0
4	0.0	0.0	0.0	0.170	0.0	0.680	0.0	0.0	0.0	0.0	0.0	0.0
5	0.0	0.0	0.0	0.022	0.0	0.362	0.0	0.066	0.0	0.0	0.0	0.0
6	0.0	0.0	0.0	0.0	0.0	0.173	0.0	0.0	0.0	0.0	0.0	0.0
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.096	0.0	0.0	0.0	0.0
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.219	0.0	0.0	0.148	0.0
9	0.0	0.0	0.0	0.0	0.602	0.0	0.0	0.631	0.0	0.0	0.679	0.0
10	0.0	0.0	0.0	0.0	0.326	0.0	0.0	0.0	0.0	0.0	0.160	0.0
11	0.0	0.0	0.0	0.0	0.166	0.0	0.0	0.0	0.0	0.0	0.090	0.0
12	0.0	0.0	0.0	0.064	0.096	3.571	0.0	0.0	0.0	0.0	0.0	0.0
13	0.0	0.0	0.0	0.0	0.0	13.504	0.0	0.0	0.073	0.0	0.0	0.0
14	0.0	0.0	0.0	0.0	9.796	1.147	0.0	0.0	2.640	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	5.727	0.457	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0	0.0	0.389	3.378	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.0	0.0	0.0	0.142	0.205	0.0	0.0	0.0	0.0	0.0	0.316
18	0.0	0.0	0.0	3.411	0.038	0.096	0.0	0.0	0.0	0.0	0.0	0.118
19	0.0	0.0	0.0	3.308	0.0	0.102	0.0	0.0	0.0	0.0	0.552	0.0
20	0.0	0.0	0.0	0.432	0.0	4.967	0.0	0.0	0.0	0.0	0.225	0.025
21	0.0	0.0	0.0	0.168	0.0	0.266	0.0	0.0	0.0	0.0	0.049	0.831
22	0.0	0.0	0.0	0.0	0.547	0.169	0.0	0.0	9.973	0.275	0.0	0.509
23	0.0	0.0	0.0	0.189	0.138	0.099	0.0	0.0	12.585	0.456	0.0	0.088
24	0.251	0.0	0.0	0.384	0.222	0.053	0.0	0.0	0.545	0.0	0.0	0.027
25	0.473	0.0	0.0	0.136	1.772	0.0	0.0	0.0	2.705	0.0	0.0	0.0
26	0.173	0.0	0.0	0.0	0.077	0.0	0.0	0.0	0.676	1.685	0.0	0.0
27	0.0	0.0	0.0	0.0	0.043	0.0	0.0	0.0	0.094	2.791	0.0	0.0
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.672	0.0	0.0
29	0.0	0.0	0.0	0.0	0.427	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	0.0	0.0	0.0	11.501	1.076	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	0.0	0.0	0.0	0.0	1.628	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MEAN	0.0289	0.0	0.0	0.7167	0.7936	1.2251	0.0	0.0326	0.9780	0.1896	0.0635	0.0617
INCHES	0.140	0.0	0.0	3.345	3.827	5.717	0.0	0.157	4.565	0.915	0.296	0.298
STA AV	0.518	0.653	1.096	1.166	0.938	1.081	0.544	0.134	0.566	1.147	0.395	0.355

NOTES: To convert mean daily discharge in CFS to IN/DAY, multiply by 0.155557. STA AV values are for 30 yr (1941-1970) record period.

1970 SELECTED RUNOFF EVENT			MCCREDIE, MISSOURI STATION RESERVOIR W-1						
ANTECEDENT CONDITIONS			RAINFALL			RUNOFF			
Date Mo-Day	Rainfall (inches)	Runoff (inches)	Date Mo-Day	Time of Day	Intensity (in/hr)	Acc. (inches)	Date Mo-Day	Time of Day	Rate (cfs)
									Acc. (inches)
EVENT OF JUNE 12 - 13, 1970									
RG 000004			RG 000004						
6-12	9.74	0.013	6-12	2239	0.0	0.0	6-12	2248	0.0
				2245	0.3000	0.03		2256	30.228
				2249	4.5001	0.33		2300	51.166
				2253	6.0000	0.73		2308	65.861
				2303	3.7202	1.35		2316	82.519
WATERSHED CONDITIONS:									
58% Pasture and meadow,									
8-12 in. tall; 2% alfalfa,									
12-14 in. tall; 20% corn,									
6-8 in. tall; 4% grain									
1% soybeans, 4-6 in. tall;									
11% grain sorghum, 6-8 in.									
tall; 2% small grain, 18-									
24 in. tall; and 6% roads									
and farmstead.									
			6-13	2400	1.5998	1.66	6-13	4	92.053
				4	2.8500	1.85		8	104.333
				8	4.2000	2.13		12	136.338
				11	1.6000	2.21		16	156.921
				14	2.2000	2.32		18	180.563
				20	0.4001	2.36		20	208.255
				39	0.0631	2.38		24	196.756
				46	0.5143	2.44		28	184.522
				50	2.5502	2.61		32	178.540
				53	4.4000	2.83		36	152.678
				59	0.3000	2.86		40	126.108
				128	0.1034	2.91		44	124.541
				132	0.3001	2.93		48	123.536
				300	0.0	2.93		52	120.852
				304	1.3499	3.02		56	122.641
				317	0.0462	3.03		100	121.684
				330	0.0923	3.05		104	126.147
				520	0.0	3.05		108	125.444
				547	0.0889	3.09		116	122.015
								120	111.264
								128	85.167
								136	67.730
								144	62.246
								206	46.964
								220	34.469
								240	24.889
								300	18.232
								320	18.277
								340	19.835
								420	14.743
								500	8.861
								540	7.508
								620	6.628
								700	4.207
								740	2.497
								808	3.244
								836	4.595
								920	2.660
								1006	1.526
								1056	0.301
								1146	1.068
								1312	1.047
								1456	0.135
								1624	0.332

NOTES: To convert runoff in CPS to IN/HR, multiply by 0.00648. Event precipitation totals for rain gages R-2, R-3, S-6, and R-8 are 2.93, 3.26, 3.17 and 2.94 respectively and the Thiessen average event precipitation is 3.08 inches.



EVENT OF JUNE 12 - 13, 1970
MCCREDIE, MISSOURI STATION RESERVOIR #1

COSHOCTON, OHIO WATERSHED 102

LOCATION: Coshocton Co., Ohio; 10 mi. NE of Coshocton; Walhonding River, Muskingum River Basin.

AREA: 1.26 acres

MONTHLY PRECIPITATION AND RUNOFF (inches)										COSHOCTON, OHIO WATERSHED 102									
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual					
1970	P	2.42	1.72	3.38	5.48	3.72	3.28	3.77	0.52	3.97	3.52	2.91	2.53	37.22					
	Q	0.084	0.0	0.0	0.248	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.332					
STA AV	P	1.88	2.19	4.03	3.38	3.94	4.59	4.31	3.01	2.39	2.38	2.45	2.29	36.85					
	Q	0.048	0.059	0.118	0.063	0.009	0.156	0.181	0.034	0.017	0.009	0.001	0.0	0.695					
ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																			
		Maximum Discharge		1 Hour		2 Hours		Maximum Volume for Selected Time Interval		6 Hours		12 Hours		1 Day		2 Days		8 Days	
		Date	Rate	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.
1970		4-24	0.254	4-24	0.166	4-24	0.194	4-24	0.202	4-24	0.202	4-23	0.202	4-22	0.202	4-16	0.202		
MAXIMUMS FOR PERIOD OF RECORD																			
		6-12	3.640	6-12	1.310	7- 5	1.427	7- 5	2.470	7- 5	2.470	7- 5	2.470	7- 5	2.470	6-29	2.597		
		1957		1957		1969		1969		1969		1969		1969		1969		1969	

NOTES: Watershed conditions: Cover of improved practice alfalfa meadow. For map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1956-59, USDA Misc. Pub. 945, p. 26.1-4. For Geology description and map, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1962, USDA Misc. Pub. 1070, pp. 26.1-1 and 26.30-3. Precipitation data from rain gage Y101. Precipitation and runoff records began April 1937. Watershed discontinued Jan. 1, 1947 to Apr. 30, 1957 and Sept. 1, 1957 to March 29, 1960. For long-time precipitation records, see National Weather Service records at Coshocton, Ohio.

COSHOCTON, OHIO WATERSHED 102													
DAILY PRECIPITATION (inches)													
1970	Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
	1	0.14S	0.0	0.0	0.79	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2	0.14S	0.67	0.10	1.15	0.44	0.0	0.0	0.0	0.0	0.21	1.00	0.0
	3	0.15S	0.14S	0.27	0.0	0.0	0.81	0.0	0.0	0.69	0.0	0.0	0.30
	4	0.19S	0.0	0.75	0.0	0.09	0.0	0.0	0.0	0.22	0.0	0.0	0.0
	5	0.05S	0.0	0.0	0.0	0.05	0.35	0.0	0.0	0.0	0.0	0.0	0.0
	6	0.06S	0.0	0.0	0.19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	7	0.10S	0.15S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	8	0.0	0.13	0.0	0.0	0.0	0.0	1.37	0.0	0.04	0.0	0.0	0.0
	9	0.0	0.26	0.01S	0.0	0.0	0.0	0.15	0.18	0.0	0.0	0.0	0.0
	10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.34	0.14	0.0
	11	0.13S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.15	0.0	0.45
	12	0.0	0.04S	0.42S	0.0	0.67	0.13	0.0	0.0	0.0	0.18	0.13	0.60
	13	0.0	0.03S	0.24S	0.55	1.06	0.0	0.0	0.0	0.0	0.19	0.0	0.16
	14	0.0	0.0	0.11S	0.07	0.0	0.0	0.0	0.0	0.0	0.15	0.64	0.0
	15	0.0	0.39M	0.93S	0.0	0.0	0.0	0.60	0.0	0.0	0.0	0.17	0.0
	16	0.0	0.0	0.95S	0.0	0.31	0.06E	0.0	0.10	0.0	0.0	0.0	0.17
	17	0.07E	0.0	0.21S	0.0	0.0	1.18	0.0	0.0	0.0	0.0	0.0	0.08
	18	0.07S	0.0	0.09S	0.0	0.0	0.01E	0.0	0.0	0.08	0.0	0.0	0.0
	19	0.0	0.0	0.13	0.28	0.0	0.0	0.05	0.07	0.0	0.0	0.0	0.0
	20	0.03S	0.0	0.08S	0.45	0.0	0.0	0.31	0.0	0.0	0.05	0.24	0.0
	21	0.0	0.0	0.0	0.0	0.0	0.35	0.0	0.0	0.06	0.42	0.0	0.15S
	22	0.0	0.0	0.41S	0.0	0.0	0.0	0.0	0.17	0.0	0.0	0.0	0.47
	23	0.0	0.0	0.0	0.08	0.0	0.0	0.09	0.0	0.0	0.0	0.0	0.06S
	24	0.0	0.0	0.0	1.92	0.61	0.0	0.0	0.0	0.10	0.0	0.0	0.0
	25	0.06E	0.0	0.22	0.0	0.49	0.02E	0.0	0.0	1.64	0.0	0.05S	0.04S
	26	0.07M	0.0	0.08	0.0	0.0	0.34	0.0	0.0	0.83	0.0	0.0	0.0
	27	0.11S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.31	0.0	0.04	0.05S
	28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.05	0.0
	29	1.05	0.18S	0.0	0.0	0.0	0.03	0.73	0.0	0.0	0.37	0.45	0.0
	30	0.0	0.0	0.0	0.0	0.0	0.0	0.47	0.0	0.0	0.46	0.0	0.0
	31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL		2.42	1.72	3.38	5.48	3.72	3.28	3.77	0.52	3.97	3.52	2.91	2.53
STA AV		1.88	2.19	4.03	3.38	3.94	4.59	4.31	3.01	2.39	2.38	2.45	2.29

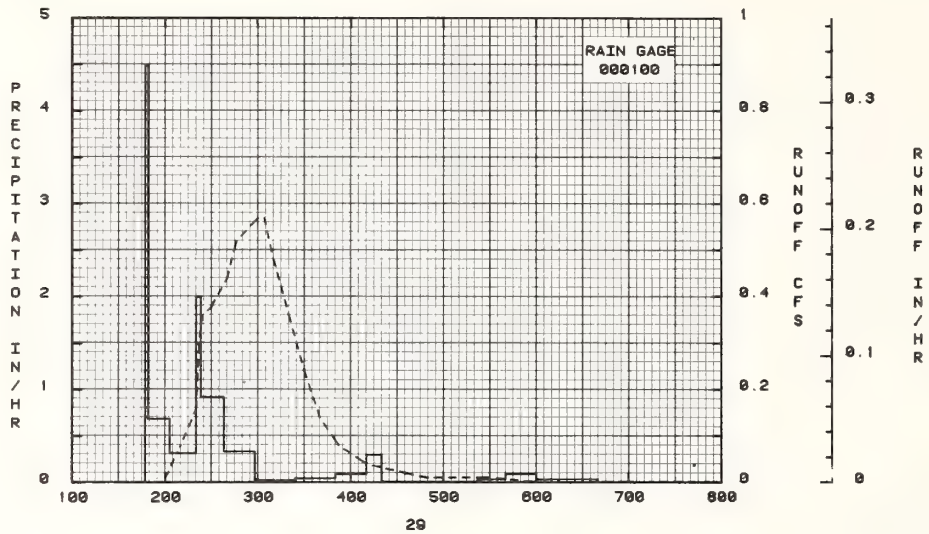
NOTES: For daily air temperatures in the vicinity, see table for Watershed W-95, p. 26.035-1. Precipitation amounts are for rain gage Y101. STA AV based on 22 yr period, part-years records included.

1970 MEAN DAILY DISCHARGE (cfs) COSHOCTON, OHIO WATERSHED 102												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	0.0	0.0	0.0	0.002	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	0.0	0.0	0.0	0.011	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	0.004		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MEAN	0.0001	0.0	0.0	0.0004	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
INCHES	0.084	0.0	0.0	0.248	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
STA AV	0.048	0.059	0.118	0.063	0.009	0.156	0.181	0.034	0.017	0.009	0.001	0.0

NOTES: To convert CFS to IN/DAY, multiply by 18.8902. STA AV based on 22 yr period, part-years records included.

1970 SELECTED RUNOFF EVENT COSHOCTON, OHIO WATERSHED 102											
ANTECEDENT CONDITIONS			RAINFALL				RUNOFF				
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.	
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)	
EVENT OF JANUARY 25, 1970											
3G 00Y101											
1-29	0.0	0.0	1-29	145	0.0	0.0	1-29	236	0.0	0.0	
				150	1.0800	0.09		237	0.025	0.0002	
				200	0.4198	0.16		240	0.057	0.0018	
				208	0.3751	0.21		246	0.110	0.0084	
				216	0.6752	0.30		256	0.139	0.0247	
WATERSHED CONDITIONS:											
Coverage legumes and grass.											
				221	0.6006	0.35		304	0.160	0.0404	
				222	3.0000	0.40		308	0.160	0.0488	
				230	0.5242	0.47		316	0.119	0.0634	
				238	0.3001	0.51		322	0.085	0.0714	
				240	1.2000	0.55		330	0.039	0.0779	
				252	0.8002	0.71		340	0.017	0.0816	
				305	0.3690	0.79		354	0.003	0.0834	
				315	0.1799	0.82		420	0.0	0.0839	
				320	0.2402	0.84					
				330	0.0600	0.85					
				400	0.0400	0.87					
				415	0.1200	0.90					
				425	0.0601	0.91					

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.78709517.



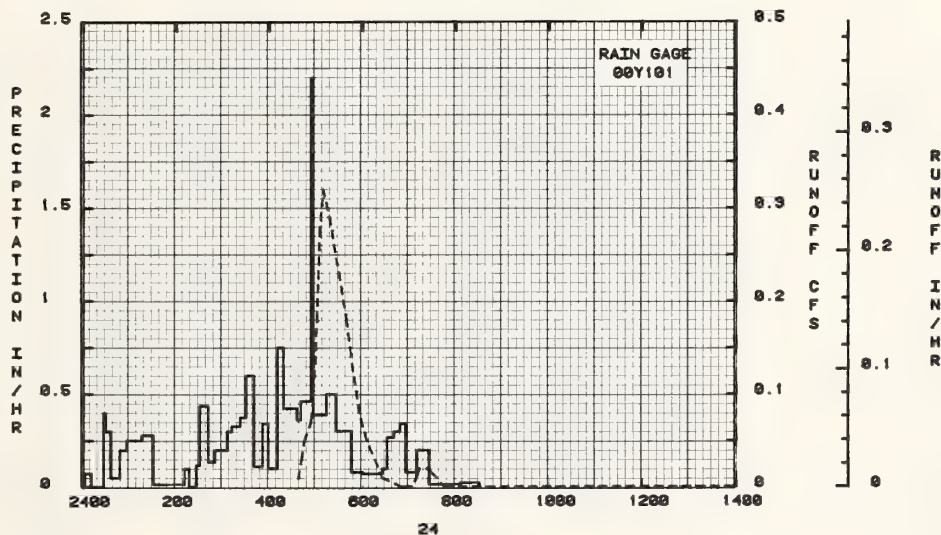
EVENT OF JANUARY 29, 1970
COSHOCTON, OHIO WATERSHED 129

1970 SELECTED RUNOFF EVENT			COSHOCTON, OHIO WATERSHED 129							
ANTECEDENT CONDITIONS			RAINFALL					RUNOFF		
Date Mo-Day	Rainfall (inches)	Runoff (inches)	Date Mo-Day	Time of Day	Intensity (in/hr)	Acc. (inches)	Date Mo-Day	Time of Day	Rate (cfs)	Acc. (inches)
EVENT OF APRIL 24, 1970										
4-24	RG 000100 0.0	0.000	4-24	14	0.0	0.0	4-24	300	0.004	0.0
				30	0.0375	0.01		310	0.006	0.0003
				35	0.4800	0.05		330	0.012	0.0014
				55	0.1200	0.09		340	0.025	0.0025
				135	0.2100	0.23		346	0.053	0.0039
WATERSHED CONDITIONS: Mixed grass.				230	0.0655	0.29		354	0.053	0.0065
				255	0.3600	0.44		400	0.082	0.0090
				310	0.2000	0.49		416	0.082	0.0170
				331	0.3143	0.60		420	0.138	0.0197
				343	0.5000	0.70		424	0.209	0.0239
				355	0.1500	0.73		430	0.222	0.0318
				405	0.3600	0.79		436	0.265	0.0407
				413	0.0750	0.80		440	0.280	0.0473
				418	1.0800	0.89		450	0.312	0.0654
				453	0.3943	1.12		456	0.400	0.0784
				456	1.8000	1.21		500	0.566	0.0902
				528	0.4875	1.47		502	0.612	0.0974
				546	0.2667	1.55		510	0.661	0.1284
				606	0.1200	1.59		516	0.612	0.1517
				630	0.0250	1.60		520	0.612	0.1666
				659	0.3103	1.75		530	0.521	0.2012
				736	0.0811	1.80		540	0.400	0.2293
								550	0.296	0.2505
								600	0.209	0.2659
								610	0.138	0.2765
								620	0.082	0.2832
								632	0.053	0.2881
								640	0.046	0.2905
								650	0.046	0.2933
								704	0.082	0.2988
								716	0.082	0.3048
								730	0.067	0.3112
								752	0.030	0.3177
								812	0.012	0.3203
								830	0.006	0.3213

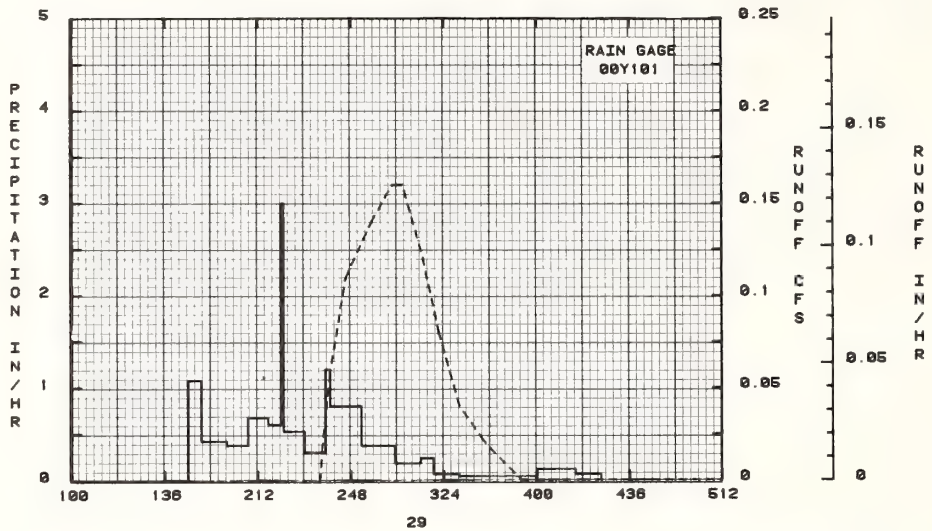
NOTES: To convert runoff in CFS to IN/HR, multiply by 0.36595407.

1970 SELECTED RUNOFF EVENT			COSHOCTON, OHIO WATERSHED 102							
ANTECEDENT CONDITIONS			RAINFALL				RUNOFF			
Date Mo-Day	Rainfall (inches)	Runoff (inches)	Date Mo-Day	Time of Day	Intensity (in/hr)	Acc. (inches)	Date Mo-Day	Time of Day	Rate (cfs)	Acc. (inches)
EVENT OF APRIL 24, 1970 (CONTINUED)										
			4-24	640	0.2667	1.62				
				648	0.3000	1.66				
				655	0.3429	1.70				
				710	0.0800	1.72				
				725	0.2000	1.77				
				806	0.0146	1.78				
				830	0.0250	1.79				

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.78709517.



EVENT OF APRIL 24, 1970
COSHOCTON, OHIO WATERSHED 102



EVENT OF JANUARY 29, 1970
COSHOCTON, OHIO WATERSHED 102

1970 SELECTED RUNOFF EVENT						COSHOCTON, OHIO WATERSHED 102			
ANTECEDENT CONDITIONS			RAINFALL			RUNOFF			
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)
EVENT OF APRIL 24, 1970									
RG 00Y101			RG 00Y101						
4-24	0.0	0.000	4-24	2	0.0	0.0	4-24	437	0.010
				10	0.0750	0.01		441	0.034
				26	0.0	0.01		445	0.050
				29	0.4000	0.03		453	0.070
				35	0.3000	0.06		455	0.085
				47	0.0500	0.07		459	0.139
				56	0.2000	0.10		501	0.183
				115	0.2526	0.18		505	0.276
				130	0.2800	0.25		509	0.323
				210	0.0150	0.26		517	0.291
				216	0.1000	0.27		529	0.234
				225	0.0	0.27		539	0.183
				230	0.1200	0.28		545	0.139
				241	0.4364	0.36		555	0.085
				250	0.1333	0.38		605	0.045
				305	0.2000	0.43		625	0.010
				311	0.3000	0.46		649	0.0
				322	0.3273	0.52		703	0.0
				330	0.3750	0.57		709	0.010
				340	0.6000	0.67		713	0.020
				351	0.1091	0.69		723	0.020
				358	0.3429	0.73		735	0.007
				410	0.1000	0.75		745	0.001
				414	0.7500	0.80		755	0.0
				418	0.7500	0.85			
				435	0.4235	0.97			
				440	0.3600	1.00			
				453	0.4615	1.10			
				456	2.2000	1.21			
				513	0.3882	1.32			
				525	0.5000	1.42			
				545	0.3000	1.52			
				600	0.0800	1.54			
				625	0.0720	1.57			
				631	0.1000	1.58			

WATERSHED CONDITIONS:
Coverage legumes and grass.

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.78709517.

COSHOCTON, OHIO WATERSHED 129

LOCATION: Coshocton Co., Ohio; 10 mi. NE of Coshocton; Walkonding River, Muskingum River Basin.

AREA: 2.71 acres

MONTHLY PRECIPITATION AND RUNOFF (inches)														COSHOCTON, OHIO WATERSHED 129															
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual															
1970	P	2.38	1.71	3.42	5.62	3.70	3.18	3.50	0.39	3.50	3.61	3.00	2.66	36.71															
	Q	0.234	0.303	0.0	0.519	0.008	0.026	0.0	0.0	0.014	0.036	0.0	0.007	0.817															
STA AV	P	2.71	2.35	3.49	3.43	3.82	4.04	4.34	2.82	2.57	2.13	2.49	2.24	36.43															
	Q	0.093	0.109	0.163	0.060	0.046	0.138	0.130	0.038	0.037	0.010	0.001	0.011	0.834															
ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																													
		Maximum Discharge				Maximum Volume for Selected Time Interval																							
		Date	Rate	1 Hour		2 Hours		6 Hours		12 Hours		1 Day		2 Days		8 Days													
		Date	Rate	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.												
1970		4-24	0.242	4-24	0.185	4-24	0.264	4-24	0.322	4-23	0.323	4-23	0.323	4-22	0.323	4-16	0.330												
MAXIMUMS FOR PERIOD OF RECORD																													
		6-12	2.360	6-12	0.980	9-1	1.010	3-4	1.530	3-4	2.420	3-4	2.900	3-3	3.510	3-3	4.000												
		1957		1957		1950		1963		1963		1963		1963		1963													

NOTES: Watershed conditions: Cover of improved practice pasture. For map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1956-59, USDA Misc. Pub. 945, p. 26.3-5. For Geology description and map, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1962, USDA Misc. Pub. 1070, pp. 26.3-1 and 26.30-3. Precipitation data from rain gage 100. Precipitation and runoff records began April, 1938. For long-time precipitation records, see National Weather Service records at Coshocton, Ohio.

1970 DAILY PRECIPITATION (inches)													COSHOCTON, OHIO WATERSHED 129	
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
1	0.13S	0.0	0.0	0.90	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
2	0.14S	0.65	0.09	1.14	0.50	0.0	0.0	0.0	0.0	0.15	1.03	0.0		
3	0.15S	0.14S	0.26	0.0	0.0	0.77E	0.0	0.0	0.70	0.0	0.0	0.30		
4	0.19S	0.0	0.72	0.0	0.10	0.0	0.0	0.0	0.10	0.0	0.0	0.0		
5	0.05S	0.0	0.0	0.0	0.02E	0.25	0.0	0.0	0.0	0.0	0.0	0.0		
6	0.06S	0.0	0.0	0.15E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
7	0.10S	0.15S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
8	0.0	0.14	0.0	0.0	0.0	0.0	1.25	0.0	0.04E	0.0	0.0	0.0		
9	0.0	0.26	0.01S	0.0	0.0	0.0	0.19	0.13	0.0	0.0	0.0	0.0		
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.35	0.15	0.0		
11	0.13S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.20	0.0	0.50		
12	0.0	0.04S	0.42S	0.0	0.66	0.13	0.0	0.0	0.0	0.19	0.10	0.65		
13	0.0	0.03S	0.24S	0.49	1.03	0.0	0.0	0.0	0.0	0.17	0.0	0.10		
14	0.0	0.0	0.11S	0.11	0.0	0.0	0.0	0.0	0.0	0.15	0.69	0.0		
15	0.0	0.30M	0.03S	0.0	0.0	0.0	0.48	0.0	0.0	0.0	0.16	0.0		
16	0.0	0.0	0.05S	0.0	0.34	0.07E	0.0	0.07	0.0	0.0	0.0	0.22		
17	0.07E	0.0	0.21S	0.0	0.0	1.15	0.0	0.0	0.0	0.0	0.0	0.04		
18	0.07S	0.0	0.09S	0.0	0.0	0.0	0.0	0.0	0.06E	0.0	0.0	0.0		
19	0.0	0.0	0.15	0.30	0.0	0.0	0.02	0.02E	0.0	0.0	0.0	0.0		
20	0.03S	0.0	0.10	0.53	0.0	0.0	0.34	0.0	0.03E	0.05	0.27	0.0		
21	0.0	0.0	0.0	0.0	0.0	0.38	0.0	0.0	0.0	0.45	0.0	0.20S		
22	0.0	0.0	0.41S	0.0	0.0	0.0	0.0	0.17	0.0	0.0	0.0	0.50		
23	0.0	0.0	0.0	0.08	0.0	0.0	0.10	0.0	0.0	0.0	0.0	0.06S		
24	0.0	0.0	0.0	1.92	0.60	0.0	0.0	0.0	0.07	0.0	0.0	0.0		
25	0.06E	0.0	0.25	0.0	0.45	0.0	0.0	0.0	1.49	0.0	0.0	0.04S		
26	0.07M	0.0	0.10	0.0	0.0	0.40	0.0	0.0	0.73	0.0	0.0	0.0		
27	0.11S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.32	0.0	0.08S	0.05S		
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.10	0.0		
29	1.02	0.18S	0.0	0.0	0.0	0.03	0.71	0.0	0.0	0.38	0.42	0.0		
30	0.0	0.0	0.0	0.0	0.0	0.0	0.41	0.0	0.0	0.52	0.0	0.0		
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
TOTAL	2.38	1.71	3.42	5.62	3.70	3.18	3.50	0.39	3.54	3.61	3.00	2.66		
STA AV	2.71	2.35	3.49	3.43	3.82	4.04	4.34	2.82	2.57	2.13	2.49	2.24		

NOTES: For daily air temperatures in the vicinity, see table for Watershed W-95, p. 26.035-1. Precipitation amounts are for rain gage 100. STA AV based on 33 yr period, part-year records included.

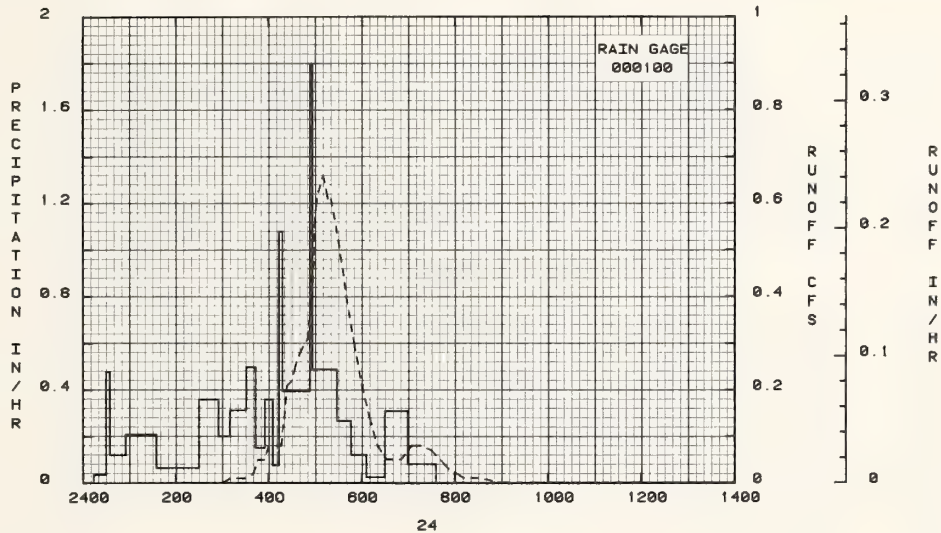
1970 MEAN DAILY DISCHARGE (cfs) COSHOCTON, OHIO WATERSHED 129												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.0	0.0	0.0	0.003	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	0.0	0.0	0.0	0.019E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.001	0.0	0.0
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.001
13	0.0	0.0	0.0	0.0	0.001E	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.0	0.0	0.0	0.0	0.003E	0.0	0.0	0.0	0.0	0.0	0.0
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.0	0.001	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	0.0	0.0	0.0	0.037	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.002	0.0	0.0	0.0
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	0.027E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MEAN	0.0009	0.0	0.0	0.0020	0.0	0.0001	0.0	0.0	0.0001	0.0	0.0	0.0
INCHES	0.234	0.003	0.0	0.519	0.008	0.026	0.0	0.0	0.014	0.006	0.0	0.007
STA AV	0.093	0.109	0.163	0.060	0.046	0.138	0.130	0.038	0.037	0.010	0.001	0.011

NOTES: To convert CFS to IN/DAY, multiply by 8.7829. STA AV based on 33 yr period, part-year records included.

1970			SELECTED RUNOFF EVENT			COSHOCTON, OHIO			WATERSHED 129		
ANTECEDENT CONDITIONS			RAINFALL			RUNOFF					
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.	
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)	
EVENT OF JANUARY 29, 1970											
	RG 000100			RG 000100							
1-29	0.0	0.003	1-29	147	0.0	0.0	1-29	200	0.012	0.0	
				149	0.5001	0.15		210	0.082	0.0029	
				203	0.6862	0.31		220	0.160	0.0103	
				220	0.3175	0.40		222	0.296	0.0131	
				223	2.0000	0.50		224	0.363	0.0171	
WATERSHED CONDITIONS:											
Mixed grass.				238	0.9200	0.73		230	0.381	0.0307	
				258	0.3301	0.84		240	0.438	0.0557	
				324	0.0231	0.85		246	0.521	0.0733	
				350	0.0462	0.87		300	0.566	0.1197	
				410	0.0900	0.90		304	0.566	0.1335	
				420	0.2999	0.95		310	0.479	0.1526	
				522	0.0097	0.96		320	0.363	0.1783	
				540	0.0333	0.97		330	0.236	0.1966	
				600	0.0900	1.00		340	0.138	0.2080	
				640	0.0300	1.02		352	0.082	0.2160	
								410	0.335	0.2224	
								436	0.020	0.2268	
								450	0.012	0.2262	
								530	0.006	0.2304	
								600	0.002	0.2311	
								640	0.0	0.2313	

1970 SELECTED RUNOFF EVENT			COSHOCTON, OHIO WATERSHED 129						
ANTECEDENT CONDITIONS			RAINFALL			RUNOFF			
Date Mo-Day	Rainfall (inches)	Runoff (inches)	Date Mo-Day	Time of Day	Intensity (in/hr)	Acc. (inches)	Date Mo-Day	Time of Day	Rate (cfs)
EVENT OF APRIL 24, 1970 (CONTINUED)									
							4-24	900	0.002
								1100	0.0
								1200	0.0
									0.3220
									0.3227
									0.3227

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.36595407.



EVENT OF APRIL 24, 1970
COSHOCTON, OHIO WATERSHED 129

COSHOCTON, OHIO WATERSHED 130

LOCATION: Coshocton Co., Ohio; 10 mi. NE of Coshocton; Walhonding River, Muskingum River Basin.

AREA: 1.63 acres

MONTHLY PRECIPITATION AND RUNOFF (inches)								COSHOCTON, OHIO WATERSHED 130							
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual	
1970	P	2.34	1.65	3.47	5.41	3.61	3.25	3.39	0.45	3.51	3.60	2.82	2.59	36.09	
	Q	0.432	0.0	0.0	0.813	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.245	
STA AV	P	2.66	2.24	3.34	3.32	3.77	3.98	4.38	2.72	2.58	2.13	2.45	2.19	35.75	
	Q	0.116	0.127	0.183	0.107	0.029	0.164	0.129	0.017	0.045	0.001	0.001	0.015	0.933	
ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS															
		Maximum Discharge		1 Hour		2 Hours		Maximum Volume for Selected Time Interval							
		Date	Rate	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.
1970		1-29	0.389	1-29	0.311	1-29	0.408	4-24	0.479	4-24	0.480	4-23	0.480	4-22	0.480
MAXIMUMS FOR PERIOD OF RECORD															
		6-12	4.060	6-12	1.420	6-12	1.440	3- 4	1.550	3- 4	2.160	3- 4	2.540	3- 4	3.140
		1957		1957		1957		1963		1963		1963		1963	

NOTES: Watershed conditions: Cover of improved practice meadow. For map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1956-59, USDA Misc. Pub. 945, p. 26.5-5. For Geology description and map, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1962, USDA Misc. Pub. 1070, pp. 26.5-1 and 26.30-3. Precipitation data from rain gage 103. Precipitation and runoff records began May, 1938. For long-time precipitation records, see National Weather Service records at Coshocton, Ohio.

1970 DAILY PRECIPITATION (inches) COSHOCTON, OHIO WATERSHED 130													
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
1	0.14S	0.0	0.0	0.85	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	0.14S	0.64	0.09	1.11	0.45	0.0	0.0	0.0	0.0	0.19	1.03	0.0	0.0
3	0.15S	0.14S	0.26	0.0	0.0	0.80	0.0	0.0	0.70	0.0	0.0	0.0	0.30
4	0.19S	0.0	0.73	0.0	0.07	0.0	0.0	0.0	0.22	0.0	0.0	0.0	0.0
5	0.05S	0.0	0.0	0.0	0.02E	0.30	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6	0.06S	0.0	0.0	0.15E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7	0.10S	0.15S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8	0.0	0.11	0.0	0.0	0.0	0.0	1.25	0.0	0.0	0.0	0.0	0.0	0.0
9	0.0	0.24	0.01S	0.0	0.0	0.0	0.18	0.15	0.0	0.0	0.0	0.0	0.0
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.33	0.16	0.0	0.0
11	0.13S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.19	0.0	0.50	
12	0.0	0.04S	0.42S	0.0	0.65	0.10	0.0	0.0	0.0	0.20	0.11	0.60	
13	0.0	0.03S	0.24S	0.50	1.05	0.0	0.0	0.0	0.0	0.15	0.0	0.10	
14	0.0	0.0	0.11S	0.06	0.0	0.0	0.0	0.0	0.0	0.16	0.62	0.0	
15	0.0	0.30M	0.03S	0.0	0.0	0.0	0.41	0.0	0.0	0.0	0.13	0.0	
16	0.0	0.0	0.05S	0.0	0.31	0.10	0.0	0.06	0.0	0.0	0.0	0.22	
17	0.07E	0.0	0.21S	0.0	0.0	1.15	0.0	0.0	0.0	0.0	0.0	0.06	
18	0.07S	0.0	0.09S	0.0	0.0	0.04	0.0	0.0	0.0	0.0	0.0	0.0	
19	0.0	0.0	0.16	0.30	0.0	0.0	0.05	0.02E	0.0	0.0	0.0	0.0	
20	0.03S	0.0	0.08S	0.49	0.0	0.0	0.36	0.0	0.0	0.05	0.22	0.0	
21	0.0	0.0	0.0	0.0	0.0	0.33	0.0	0.0	0.03	0.44	0.0	0.20S	
22	0.0	0.0	0.41S	0.0	0.0	0.0	0.0	0.22	0.0	0.0	0.0	0.40	
23	0.0	0.0	0.0	0.08	0.0	0.0	0.10	0.0	0.0	0.0	0.0	0.12S	
24	0.0	0.0	0.0	1.87	0.69	0.0	0.0	0.0	0.05	0.0	0.0	0.0	
25	0.06E	0.0	0.25	0.0	0.46	0.0	0.0	0.0	1.40	0.0	0.0	0.04S	
26	0.07M	0.0	0.15	0.0	0.0	0.38	0.0	0.0	0.82	0.0	0.0	0.0	
27	0.11S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.29	0.0	0.05S	0.05S	
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.05	0.0	
29	0.97	0.18S	0.0	0.0	0.0	0.05	0.57	0.0	0.0	0.41	0.45	0.0	
30	0.0	0.0	0.0	0.0	0.0	0.0	0.47	0.0	0.0	0.48	0.0	0.0	
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
TOTAL	2.34	1.65	3.47	5.41	3.61	3.25	3.39	0.45	3.51	3.60	2.82	2.59	
STA AV	2.66	2.24	3.34	3.32	3.77	3.98	4.38	2.72	2.58	2.13	2.45	2.19	

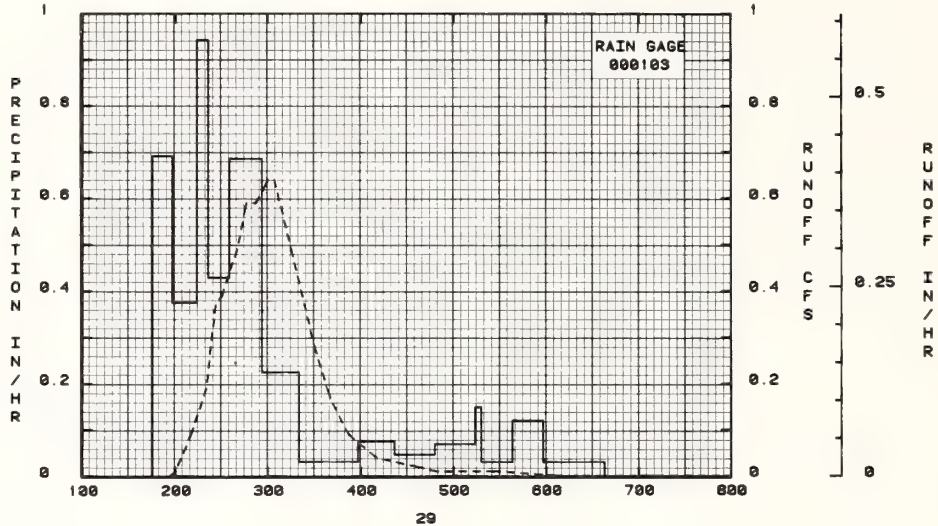
NOTES: For daily air temperatures in the vicinity, see table for Watershed W-95, p. 26.035-1. Precipitation amounts are for rain gage 103. STA AV based on 33 yr period, part-year records included.

1970 MEAN DAILY DISCHARGE (cfs) COSHOCTON, OHIO WATERSHED 130												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.0	0.0	0.0	0.004	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	0.0	0.0	0.0	0.019	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	0.0	0.0	0.0	0.033	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	0.030		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MEAN	0.0010	0.0	0.0	0.0019	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
INCHES	0.432	0.0	0.0	0.813	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
STA AV	0.116	0.127	0.183	0.107	0.329	0.164	0.129	0.017	0.045	0.001	0.001	0.015

NOTES: To convert CFS to IN/DAY, multiply by 14.6022. STA AV based on 33 yr period, part-year records included.

1970 SELECTED RUNOFF EVENT COSHOCTON, OHIO WATERSHED 130										
ANTECEDENT CONDITIONS			RAINFALL				RUNOFF			
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)
EVENT OF JANUARY 29, 1970										
RG 000103										
1-29	0.0	0.0	1-29	145	0.0	0.0	1-29	156	0.0	0.0
				158	0.6927	0.15		200	0.014	0.0003
				214	0.3751	0.25		210	0.090	0.0056
				221	0.9426	0.36		220	0.190	0.0198
				235	0.4285	0.46		226	0.370	0.0368
WATERSHED CONDITIONS:										
Mixed grass.										
				256	0.6860	0.70		230	0.390	0.0523
				320	0.2249	0.79		240	0.490	0.0969
				358	0.0316	0.81		246	0.590	0.1298
				422	0.0750	0.84		252	0.590	0.1656
				448	0.0462	0.86		300	0.640	0.2156
				514	0.0692	0.89		304	0.640	0.2416
				518	0.1500	0.90		315	0.490	0.3046
				538	0.0300	0.91		330	0.280	0.3632
				558	0.1290	0.95		340	0.170	0.3860
				638	0.0300	0.97		352	0.090	0.4018
								410	0.041	0.4138
								436	0.024	0.4224
								450	0.014	0.4251
								530	0.038	0.4296
								610	0.003	0.4318
								640	0.0	0.4323

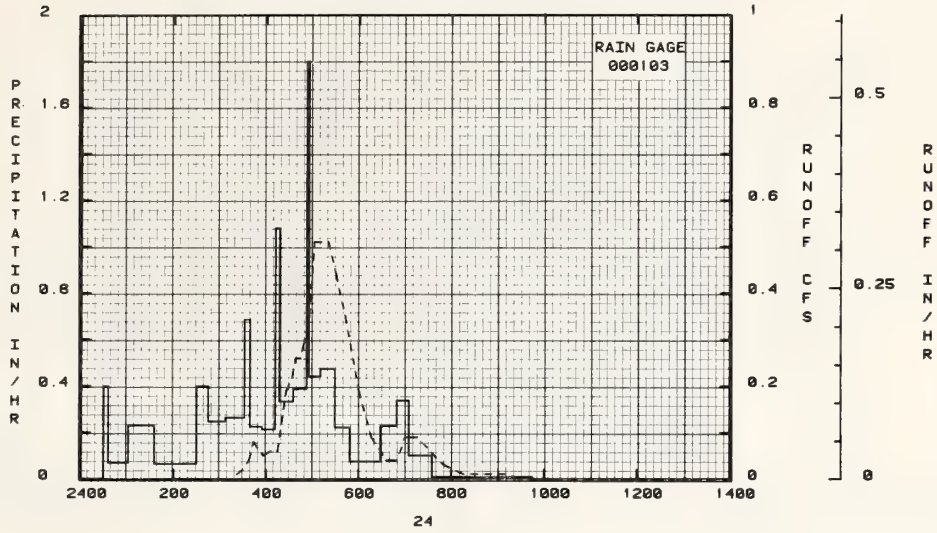
NOTES: To convert runoff in CFS to IN/HR, multiply by 0.60842671.



EVENT OF JANUARY 29, 1970
COSHOCTON, OHIO WATERSHED 130

1970 SELECTED RUNOFF EVENT			COSHOCTON, OHIO WATERSHED 130							
ANTECEDENT CONDITIONS			RAINFALL				RUNOFF			
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)
EVENT OF APRIL 24, 1970										
RG 000103			RG 000103							
4-24	0.0	0.000	4-24	29	0.0	0.0	4-24	322	0.008	0.0
				35	0.4000	0.04		330	0.024	0.0013
				101	0.0692	0.07		338	0.041	0.0039
				135	0.2294	0.20		344	0.077	0.0075
				212	0.0649	0.24		356	0.053	0.0154
WATERSHED CONDITIONS: Mixed grass.				230	0.0667	0.26		406	0.068	0.0213
				245	0.4000	0.36		415	0.064	0.0271
				307	0.2455	0.45		420	0.120	0.0318
				332	0.2640	0.56		426	0.190	0.0412
				339	0.6857	0.64		434	0.220	0.0579
				355	0.2250	0.70		438	0.260	0.0676
				412	0.2118	0.76		444	0.260	0.0834
				417	1.0800	0.85		450	0.300	0.1005
				435	0.3333	0.95		456	0.350	0.1202
				452	0.3882	1.06		502	0.510	0.1464
				455	1.8000	1.15		520	0.510	0.2395
				510	0.4400	1.26		530	0.440	0.2877
				529	0.4737	1.41		542	0.350	0.3358
				548	0.2211	1.48		600	0.190	0.3851
				628	0.0750	1.53		616	0.090	0.4078
				649	0.2286	1.61		636	0.041	0.4211
				705	0.3375	1.70		650	0.041	0.4269
				735	0.1000	1.75		700	0.090	0.4335
				945	0.0092	1.77		716	0.090	0.4481
								750	0.031	0.4690
							816	0.008	0.4741	
							910	0.008	0.4785	
							930	0.0	0.4793	

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.60842671.



EVENT OF APRIL 24, 1970
COSHOCTON, OHIO WATERSHED 130

COSHOCTON, OHIO WATERSHED 123

LOCATION: Coshocton Co., Ohio; 10 mi. NE of Coshocton; Walhonding River, Muskingum River Basin.

AREA: 1.37 acres

MONTHLY PRECIPITATION AND RUNOFF (inches)										COSHOCTON, OHIO WATERSHED 123							
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual			
1970	P	2.44	1.79	3.49	5.73	3.57	3.41	3.77	0.57	3.67	3.67	3.04	2.59	37.74			
	Q	0.658	0.294	0.132	1.339	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.009	2.432			
STA AV	P	2.76	2.38	3.45	3.54	3.83	4.22	4.49	2.82	2.60	2.26	2.58	2.36	37.29			
	Q	0.382	0.327	0.429	0.277	0.120	0.273	0.220	0.073	0.046	0.017	0.010	0.117	2.291			
ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																	
		Maximum Discharge		1 Hour		2 Hours		Maximum Volume for Selected Time Interval									
		Date	Vol.	Date	Vol.	Date	Vol.	6 Hours		12 Hours		1 Day		2 Days		8 Days	
		Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.
1970		1-29	0.656	1-29	0.476	1-29	0.581	1-29	0.658	4- 2	0.707	4- 1	0.707	3-31	0.707	2- 1	0.938
MAXIMUMS FOR PERIOD OF RECORD																	
		6-12	5.970	6-12	1.370	6-12	1.480	7- 5	2.054	7- 5	2.131	1-21	2.330	1-21	2.330	3- 4	2.660
		1957		1957		1957		1969		1969		1959		1959		1964	

NOTES: Watershed conditions: Cover of wheat to corn. For map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1956-59, USDA Misc. Pub. 945, p. 26.10-6. For Geology description and map, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1962, USDA Misc. Pub. 1070, pp. 26.10-1 and 26.30-3. Precipitation data from rain gage Y103. Precipitation and runoff records began Jan. 1939. For long-time precipitation records, see National Weather Service records at Coshocton, Ohio.

1970 DAILY PRECIPITATION (inches)													COSHOCTON, OHIO WATERSHED 123	
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
1	0.16S	0.0	0.0	0.80E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
2	0.14S	0.75	0.07	1.27E	0.47	0.0	0.0	0.0	0.0	0.18	1.04	0.0		
3	0.15S	0.14S	0.37	0.0	0.0	0.0	0.0	0.0	0.67	0.0	0.0	0.28		
4	0.19S	0.0	0.75	0.0	0.08	0.0	0.0	0.0	0.20	0.0	0.0	0.0		
5	0.05S	0.0	0.0	0.0	0.05	0.31	0.0	0.0	0.0	0.0	0.0	0.0		
6	0.06S	0.0	0.0	0.19E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
7	0.10S	0.15S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
8	0.0	0.14	0.0	0.0	0.0	0.0	1.34E	0.0	0.03	0.0	0.0	0.0		
9	0.0	0.24	0.01S	0.0	0.0	0.0	0.15	0.20	0.0	0.0	0.0	0.0		
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.32	0.14	0.0		
11	0.13S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.22	0.0	0.45		
12	0.0	0.04S	0.42S	0.0	0.66	0.20	0.0	0.0	0.0	0.24	0.14	0.60		
13	0.0	0.03S	0.24S	0.50E	0.99	0.0	0.0	0.0	0.0	0.15	0.0	0.13		
14	0.0	0.0	0.11S	0.08	0.0	0.0	0.0	0.0	0.0	0.17	0.65	0.0		
15	0.0	0.30E	0.03S	0.0	0.0	0.0	0.55	0.0	0.0	0.0	0.18	0.0		
16	0.0	0.0	0.05S	0.0	0.31	0.11	0.0	0.12	0.0	0.0	0.0	0.24		
17	0.07E	0.0	0.21S	0.0	0.0	1.10	0.0	0.0	0.0	0.0	0.0	0.07		
18	0.07S	0.0	0.09S	0.0	0.0	0.0	0.0	0.0	0.06E	0.0	0.0	0.0		
19	0.0	0.0	0.13E	0.29	0.0	0.0	0.06	0.08	0.0	0.0	0.0	0.0		
20	0.03S	0.0	0.07	0.54	0.0	0.0	0.36	0.0	0.03E	0.04	0.20	0.0		
21	0.0	0.0	0.0	0.0	0.0	0.46	0.0	0.0	0.0	0.43E	0.0	0.18S		
22	0.0	0.0	0.41S	0.0	0.0	0.0	0.0	0.17	0.0	0.0	0.0	0.47		
23	0.0	0.0	0.0	0.06	0.0	0.0	0.09	0.0	0.0	0.0	0.0	0.07S		
24	0.0	0.0	0.0	2.00	0.72	0.0	0.0	0.0	0.10	0.0	0.0	0.0		
25	0.06E	0.0	0.25	0.0	0.29	0.02	0.0	0.0	1.53	0.0	0.09S	0.05S		
26	0.07E	0.0	0.10	0.0	0.0	0.38	0.0	0.0	0.78	0.0	0.0	0.0		
27	0.11S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.27	0.0	0.04	0.05S		
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.14	0.0		
29	1.05	0.0	0.18S	0.0	0.0	0.03E	0.78	0.0	0.0	0.40	0.42	0.0		
30	0.0	0.0	0.0	0.0	0.0	0.0	0.44	0.0	0.0	0.52	0.0	0.0		
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
TOTAL	2.44	1.79	3.49	5.73	3.57	3.41	3.77	0.57	3.67	3.67	3.04	2.59		
STA AV	2.76	2.38	3.45	3.54	3.83	4.22	4.49	2.82	2.60	2.26	2.58	2.36		

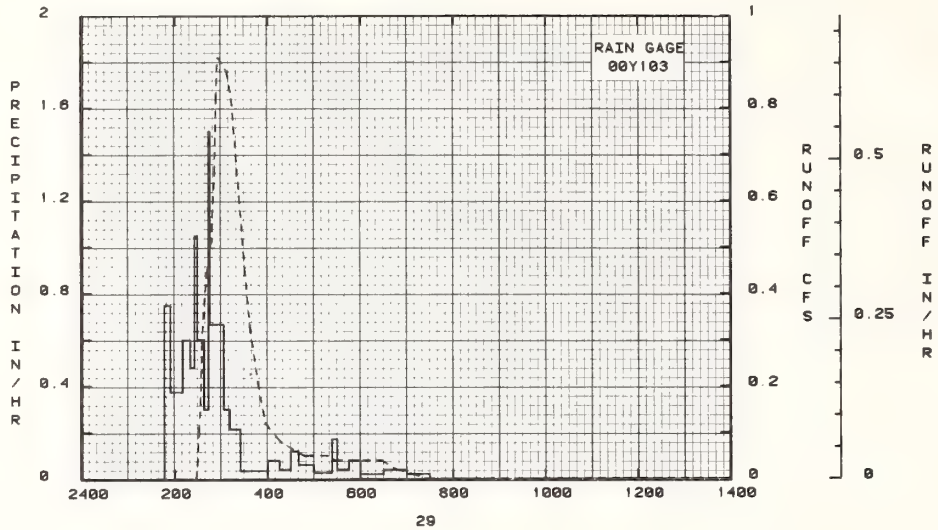
NOTES: For daily air temperatures in the vicinity, see table for Watershed W-95, p. 26.035-1. Precipitation amounts are for rain gage Y103. STA AV based on 32 yr period.

1970 MEAN DAILY DISCHARGE (cfs) COSHOCTON, OHIO WATERSHED 123												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.0	0.0	0.0	0.0 T	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	0.0	0.016	0.0	0.041	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	0.0	0.0	0.008	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9	0.0	0.001	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.001
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	0.0	0.0	0.0	0.036	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	0.038	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MEAN	0.0012	0.0006	0.0002	0.0026	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
INCHES	0.658	0.294	0.132	1.339	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.009
STA AV	0.382	0.327	0.429	0.277	0.120	0.273	0.220	0.073	0.046	0.017	0.010	0.117

NOTES: To convert CFS to IN/DAY, multiply by 17.3735. STA AV based on 32 yr period.

1970 SELECTED RUNOFF EVENT COSHOCTON, OHIO WATERSHED 123											
ANTECEDENT CONDITIONS			RAINFALL					RUNOFF			
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.	
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)	
EVENT OF JANUARY 29, 1970											
RG 00Y103											
1-29	0.0	0.0	1-29	146	0.0	0.0	1-29	227	0.0	0.0	
				154	0.7502	0.10		229	0.030	0.0004	
				210	0.3751	0.20		231	0.099	0.0020	
				220	0.5957	0.30		233	0.160	0.0051	
				225	0.4805	0.34		235	0.296	0.0106	
WATERSHED CONDITIONS:											
Coverage of wheat.											
				229	1.0503	0.41		237	0.363	0.0185	
				237	0.6001	0.49		241	0.438	0.0378	
				243	0.2997	0.52		247	0.521	0.0725	
				245	1.5000	0.57		251	0.661	0.1010	
				303	0.6671	0.77		253	0.820	0.1189	
				311	0.3001	0.81		255	0.906	0.1396	
				325	0.2142	0.86		307	0.877	0.2686	
				400	0.0343	0.88		313	0.820	0.3301	
				415	0.0800	0.90		323	0.612	0.4165	
				430	0.0400	0.91		331	0.438	0.4672	
				440	0.1231	0.93		337	0.328	0.4949	
				500	0.0600	0.95		347	0.209	0.5273	
				523	0.0261	0.96		357	0.118	0.5470	
				530	0.1714	0.98		417	0.082	0.5711	
				545	0.0490	0.99		447	0.053	0.5955	
				600	0.0890	1.01		459	0.046	0.6027	
				630	0.0200	1.02		517	0.046	0.6127	
				700	0.0400	1.04		527	0.041	0.6189	
				730	0.0200	1.05		547	0.035	0.6272	
								557	0.035	0.6314	
								603	0.041	0.6341	
								627	0.041	0.6460	
								647	0.020	0.6534	
								707	0.006	0.6565	
								727	0.002	0.6575	
								817	0.0	0.6581	

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.72389455.



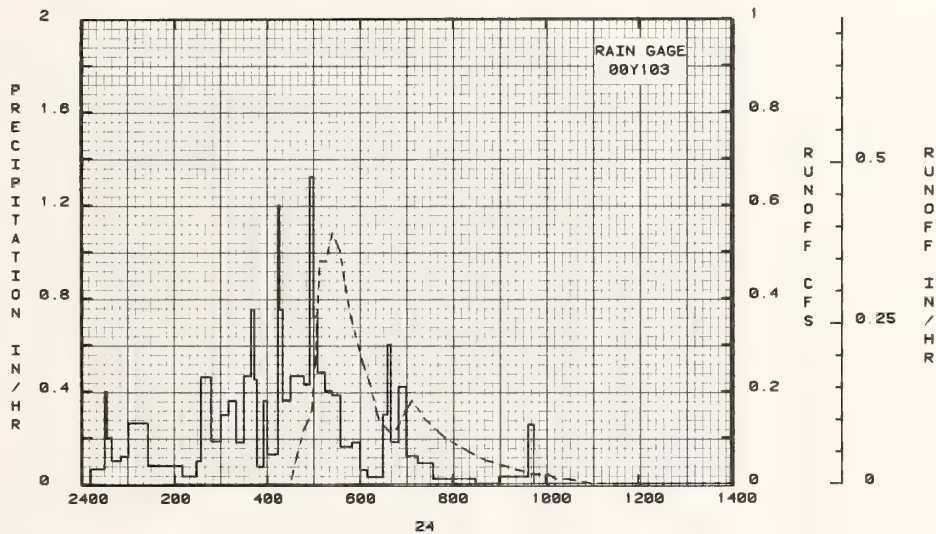
EVENT OF JANUARY 29, 1970
COSHOCTON, OHIO WATERSHED 123

1970 SELECTED RUNOFF EVENT						COSHOCTON, OHIO WATERSHED 123			
ANTECEDENT CONDITIONS			RAINFALL			RUNOFF			
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)
									Acc. (inches)
EVENT OF APRIL 24, 1970									
RG 00Y103			RG 00Y103						
4-24	0.0	0.000	4-24	11	0.0	0.0	4-24	432	0.006
				29	0.0667	0.02		434	0.030
				32	0.4000	0.04		440	0.067
				38	0.2000	0.06		448	0.118
				50	0.1000	0.08		454	0.138
WATERSHED CONDITIONS: Coverage of wheat.				100	0.1200	0.10		458	0.160
				125	0.2640	0.21		502	0.265
				210	0.0800	0.27		504	0.328
				228	0.0333	0.28		508	0.479
				234	0.1000	0.29		516	0.479
				247	0.4615	0.39		524	0.543
				300	0.1846	0.43		534	0.500
				310	0.3000	0.48		548	0.363
				320	0.3600	0.54		604	0.265
				330	0.1800	0.57		614	0.209
				339	0.4667	0.64		624	0.138
				343	0.7500	0.69		634	0.118
				347	0.4500	0.72		640	0.108
				355	0.0750	0.73		648	0.118
				400	0.3600	0.76		700	0.160
				414	0.1286	0.79		708	0.184
				416	1.2000	0.83		724	0.138
				420	0.7500	0.88		750	0.099
				430	0.3600	0.94		820	0.067
				448	0.4667	1.08		844	0.053
				455	0.4286	1.13		904	0.041
				500	1.3200	1.24		924	0.030
				505	0.7200	1.30		944	0.020
				515	0.4800	1.38		1004	0.020
				524	0.4000	1.44		1014	0.012
				535	0.3818	1.51		1030	0.006
				550	0.1600	1.55		1100	0.002
				600	0.1800	1.58		1130	0.0
				610	0.0600	1.59			
				630	0.0300	1.60			

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.72389455.

1970	SELECTED RUNOFF EVENT						COSHOCTON, OHIO		WATERSHED 123			
ANTECEDENT CONDITIONS			RAINFALL				RUNOFF					
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.		
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)		
EVENT OF APRIL 24, 1970 (CONTINUED)												
			4-24	636	0.3000	1.63						
				640	0.6000	1.67						
				650	0.1800	1.70						
				700	0.4200	1.77						
				715	0.1200	1.80						
				735	0.0900	1.83						
				830	0.0218	1.85						
				900	0.0	1.85						
				938	0.0316	1.87						
				945	0.2571	1.90						

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.72389455.



EVENT OF APRIL 24, 1970
COSHOCTON, OHIO WATERSHED 123

COSHOCOTON, OHIO WATERSHED 109

LOCATION: Coshocton Co., Ohio; 10 mi. NE of Coshocton; Walhonding River, Muskingum River Basin.

AREA: 1.69 acres

MONTHLY PRECIPITATION AND RUNOFF (inches)														COSHOCTON, OHIO WATERSHED 109			
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual			
1970	P	2.46	1.76	3.42	5.79	3.67	3.52	3.42	0.49	3.72	3.56	2.86	2.46	37.13			
	Q	0.187	0.0	0.0	0.013	0.0	0.0	0.013	0.0	0.0	0.0	0.0	0.0	0.213			
STA AV	P	2.65	2.26	3.39	3.49	3.84	4.21	4.52	2.77	2.63	2.20	2.48	2.24	36.69			
	Q	0.070	0.145	0.127	0.045	0.100	0.257	0.295	0.146	0.046	0.010	0.001	0.017	1.258			
ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																	
		Maximum Discharge		1 Hour		2 Hours		Maximum Volume for Selected Time Interval		12 Hours		1 Day		2 Days		8 Days	
		Date	Rate	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.
1970		1-29	0.248	1-29	0.167	1-29	0.181	1-29	0.187	1-29	0.187	1-28	0.187	1-27	0.187	1-21	0.187
MAXIMUMS FOR PERIOD OF RECORD																	
		5-17	4.340	6-29	0.820	6-28	1.090	7- 5	1.416	3- 4	1.920	3- 4	2.170	3- 3	2.550	3- 1	2.660
		1941		1941		1940		1969		1963		1963		1963		1963	

NOTES: Watershed conditions: Cover of wheat to corn. For map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1956-59, USDA Misc. Pub. 945, p. 26.13-4. For Geology description and map, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1962, USDA Misc. Pub. 1070, pp. 26.13-1 and 26.30-3. Precipitation data from rain gage Y102. Precipitation and runoff records began Nov. 1938. For long-time precipitation records, see National Weather Service records at Coshocton, Ohio.

1970 DAILY PRECIPITATION (inches)													
COSHOCOTON, OHIO WATERSHED 109													
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
1	3.13S	0.0	0.0	0.88	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	0.14S	0.70	0.05	1.22	0.47	0.0	0.0	0.0	0.0	0.20	1.05	0.0	0.0
3	0.15S	0.14S	0.31	0.0	0.0	0.82	0.0	0.0	0.60	0.0	0.0	0.26	0.0
4	0.19S	0.0	0.75	0.0	0.10	0.0	0.0	0.0	0.20	0.0	0.0	0.0	0.0
5	0.05S	0.0	0.0	0.0	0.05	0.31	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6	0.06S	0.0	0.0	0.19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7	0.10S	0.16S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8	0.0	0.14	0.0	0.0	0.0	0.0	1.25	0.0	0.03	0.0	0.0	0.0	0.0
9	0.0	0.25	0.01S	0.0	0.0	0.0	0.19E	0.17	0.0	0.0	0.0	0.0	0.0
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.36	0.16	0.0	0.0
11	0.13S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.16	0.0	0.46	0.0
12	0.0	0.04S	0.42S	0.0	0.66	0.14	0.0	0.0	0.0	0.20	0.10	0.63	0.0
13	0.0	0.03S	0.24S	0.55	1.03	0.0	0.0	0.0	0.0	0.19	0.0	0.10	0.0
14	0.0	0.0	0.11S	0.09	0.0	0.0	0.0	0.0	0.0	0.16	0.38	0.0	0.0
15	0.0	0.30S	0.03S	0.0	0.0	0.0	0.40	0.0	0.0	0.0	0.39	0.0	0.0
16	0.0	0.0	0.05S	0.0	0.32	0.07	0.0	0.08	0.0	0.0	0.0	0.25	0.0
17	0.07E	0.0	0.21S	0.0	0.0	1.32	0.0	0.0	0.0	0.0	0.0	0.05	0.0
18	0.07S	0.0	0.09S	0.0	0.0	0.03	0.0	0.0	0.07	0.0	0.0	0.0	0.0
19	0.0	0.0	0.13	0.29	0.0	0.0	0.06	0.06	0.0	0.0	0.0	0.0	0.0
20	0.03S	0.0	0.08	0.51	0.0	0.0	0.38	0.0	0.01	0.04	0.18	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	0.40	0.0	0.0	0.05	0.40	0.0	0.15S	0.0
22	0.0	0.0	0.41S	0.0	0.0	0.0	0.0	0.18	0.0	0.0	0.0	0.43	0.0
23	0.0	0.0	0.0	0.07	0.0	0.0	0.10	0.0	0.0	0.0	0.0	0.07S	0.0
24	0.0	0.0	0.0	1.99	0.60	0.0	0.0	0.0	0.07	0.0	0.0	0.0	0.0
25	0.06E	0.0	0.25	0.0	0.44	0.0	0.0	0.0	1.60	0.0	0.07S	0.03S	0.0
26	0.07M	0.0	0.10	0.0	0.0	0.38	0.0	0.0	0.80	0.0	0.0	0.0	0.0
27	0.11S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.29	0.0	0.05	0.03S	0.0
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.06	0.0	0.0
29	1.10	0.0	0.18S	0.0	0.0	0.05	0.64	0.0	0.0	0.37	0.42	0.0	0.0
30	0.0	0.0	0.0	0.0	0.0	0.0	0.40	0.0	0.0	0.48	0.0	0.0	0.0
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL		2.46	1.76	3.42	5.79	3.67	3.52	3.42	0.49	3.72	3.56	2.86	2.46
STA AV		2.65	2.26	3.39	3.49	3.84	4.21	4.52	2.77	2.63	2.20	2.48	2.24

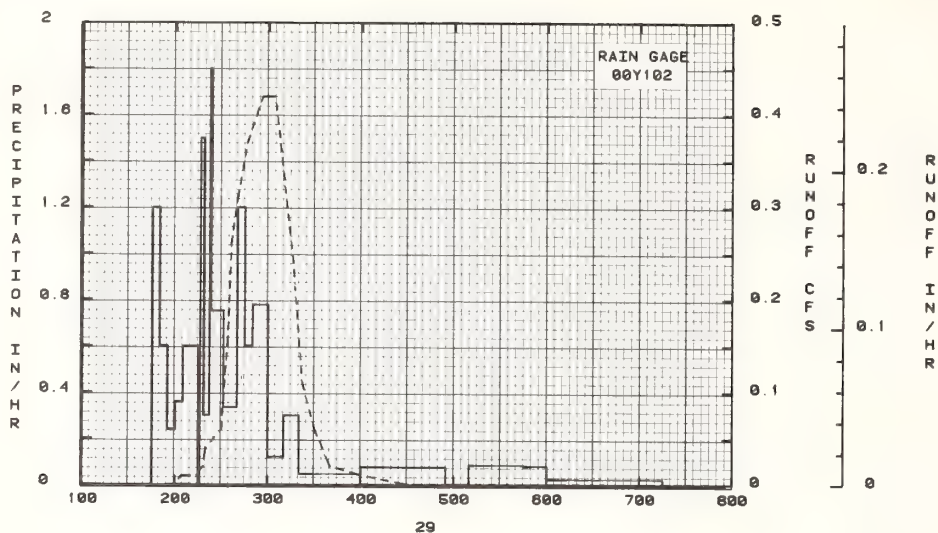
NOTES: For daily air temperatures in the vicinity, see table for Watershed W-95, p. 26.035-1. Precipitation amounts are for rain gage Y102. STA AV based on 33 yr period, part-year records included.

1970 MEAN DAILY DISCHARGE (cfs) COSHOCTON, OHIO WATERSHED 109												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	0.0	0.0	0.0	0.0 T	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	0.0	0.0	0.0	0.001	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	0.013	0.0	0.0	0.0	0.0	0.0	0.001	0.0	0.0	0.0	0.0	0.0
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0 T	0.0	0.0	0.0	0.0	0.0
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MEAN	0.0004	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
INCHES	0.187	0.0	0.0	0.013	0.0	0.0	0.013	0.0	0.0	0.0	0.0	0.0
STA AV	0.070	0.145	0.127	0.045	0.100	0.257	0.295	0.146	0.046	0.010	0.001	0.017

NOTES: To convert CFS to IN/DAY, multiply by 14.0638. STA AV based on 33 yr period, part-year records included.

1970	SELECTED RUNOFF EVENT					COSHOCTON, OHIO WATERSHED 109						
ANTECEDENT CONDITIONS			RAINFALL				RUNOFF					
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.		
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)		
EVENT OF JANUARY 29, 1970												
RG 00Y102			RG 00Y102									
1-29	0.0	0.0	1-29	145	0.0	0.0	1-29	154	0.001	0.0		
				150	1.2000	0.10		200	0.002	0.0001		
				155	0.6006	0.15		204	0.007	0.0003		
				200	0.2395	0.17		210	0.007	0.0007		
				205	0.3604	0.20		214	0.014	0.0011		
WATERSHED CONDITIONS:				215	0.5997	0.30		218	0.023	0.0018		
Coverage of seeded wheat.				216	0.0	0.30		220	0.035	0.0024		
				218	1.5000	0.35		230	0.061	0.0071		
				222	0.3001	0.37		234	0.156	0.0113		
				223	1.8000	0.40		236	0.264	0.0154		
				231	0.7502	0.50		240	0.313	0.0267		
				240	0.3336	0.55		246	0.365	0.0466		
				245	1.2000	0.65		252	0.403	0.0691		
				250	0.6006	0.70		256	0.422	0.0852		
				300	0.7796	0.83		304	0.422	0.1183		
				310	0.1201	0.85		310	0.330	0.1403		
				320	0.2999	0.90		316	0.235	0.1569		
				400	0.0450	0.93		322	0.113	0.1671		
				455	0.0764	1.00		330	0.061	0.1739		
				510	0.0	1.00		340	0.023	0.1780		
				545	0.0857	1.05		400	0.007	0.1809		
				630	0.0800	1.07		430	0.004	0.1825		
				715	0.0240	1.10		500	0.004	0.1837		
								630	0.002	0.1863		
								700	0.001	0.1867		

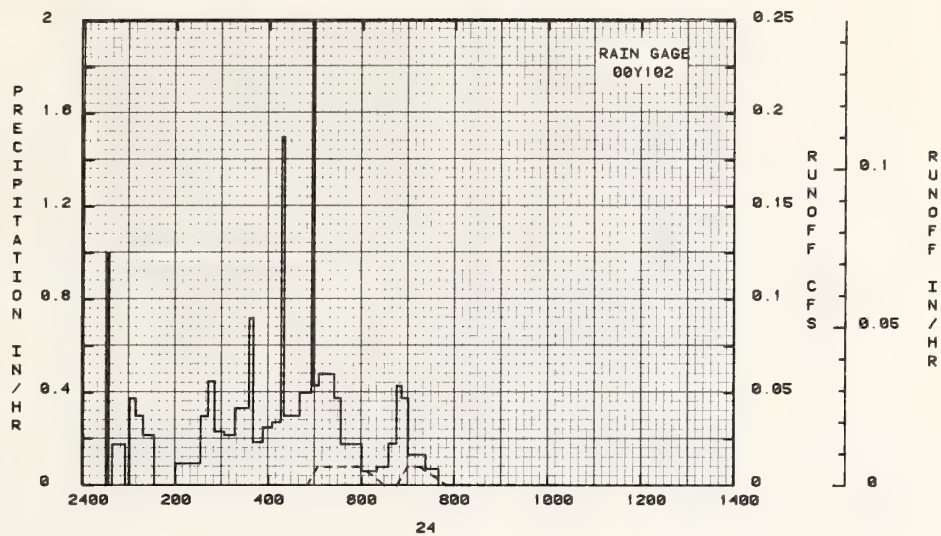
NOTES: To convert runoff in CFS to IN/HR, multiply by 0.58682576.



EVENT OF JANUARY 29, 1970
COSHOCTON, OHIO WATERSHED 109

1970 SELECTED RUNOFF EVENT			COSHOCTON, OHIO WATERSHED 109							
ANTECEDENT CONDITIONS			RAINFALL							
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)
EVENT OF APRIL 24, 1970										
4-24	RG 00Y102	0.000	4-24	RG 00Y102			4-24			
	0.0			10	0.0	0.0		450	0.002	0.0
				30	0.0	0.0		504	0.007	0.0006
				33	1.0000	0.05		600	0.007	0.0044
				38	0.0	0.05		630	0.002	0.0057
				55	0.1765	0.10		646	0.002	0.0060
WATERSHED CONDITIONS: Coverage of seeded wheat.				100	0.0	0.10		700	0.007	0.0066
				108	0.3750	0.15		716	0.007	0.0077
				118	0.3000	0.20		750	0.002	0.0092
				132	0.2143	0.25		820	0.001	0.0096
				200	0.0	0.25		900	0.0	0.0098
				232	0.0938	0.30				
				242	0.3000	0.35				
				250	0.4500	0.41				
				303	0.2308	0.46				
				317	0.2143	0.51				
				335	0.3333	0.61				
				340	0.7200	0.67				
				353	0.1846	0.71				
				405	0.2500	0.76				
				416	0.2727	0.81				
				420	1.5000	0.91				
				440	0.3000	1.01				
				455	0.4000	1.11				
				458	2.0000	1.21				
				505	0.4286	1.26				
				525	0.4800	1.42				
				533	0.3750	1.47				
				600	0.1778	1.55				
				620	0.0600	1.57				
				635	0.0800	1.59				
				645	0.1800	1.62				
				652	0.4286	1.67				
				700	0.3750	1.72				
				723	0.1304	1.77				
				740	0.0706	1.79				

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.58682576.



EVENT OF APRIL 24, 1970
COSHOCTON, OHIO WATERSHED 109

COSHOCTON, OHIO WATERSHED 106

LOCATION: Coshocton Co., Ohio; 10 mi. NE of Coshocton; Walhonding River, Muskingum River Basin.

AREA: 1.56 acres

MONTHLY PRECIPITATION AND RUNOFF (inches)										COSHOCTON, OHIO WATERSHED 106							
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual			
1970	P	2.43	1.64	3.28	5.27	3.51	3.64	2.77	0.41	3.86	3.65	2.53	2.36	35.35			
	Q	0.145	0.0	0.0	0.445	0.012	0.027	0.0	0.0	0.0	0.0	0.027	0.037	0.693			
STA AV	P	2.63	2.09	3.17	3.25	3.68	4.08	4.45	2.71	2.64	2.13	2.38	2.17	35.37			
	Q	0.235	0.217	0.117	0.132	0.117	0.286	0.309	0.201	0.155	0.018	0.029	0.078	1.893			
ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																	
		Maximum Discharge		1 Hour		2 Hours		Maximum Volume for Selected Time Interval									
		Date	Rate	Date	Vol.	Date	Vol.	6 Hours		12 Hours		1 Day		2 Days		8 Days	
								Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.
1970		1-29	0.159	1-29	0.115	1-29	0.141	4- 2	0.168	4- 1	0.238	4- 1	0.247	3-31	0.247	3-25	0.247
MAXIMUMS FOR PERIOD OF RECORD																	
		8-23	7.630	9- 1	1.260	9- 1	1.380	9- 1	1.390	2-23	1.410	2-23	1.410	2-23	2.000	2-19	2.440
		1964		1950		1950		1950		1960		1962		1962		1962	

NOTES: Watershed conditions: Cover of meadow, prevailing practice. For map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1956-59, USDA Misc. Pub. 945, p. 26.20-5. For Geology description and map, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1962, USDA Misc. Pub. 1070, pp. 26.20-1 and 26.30-3. Precipitation data from rain gage 113. Precipitation and runoff records began Apr. 1939. For long-time precipitation records, see National Weather Service records at Coshocton, Ohio.

1970 DAILY PRECIPITATION (inches)													COSHOCTON, OHIO WATERSHED 106	
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
1	0.14S	0.0	0.0	0.85	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
2	0.14S	0.63	0.10	1.11	0.47	0.0	0.0	0.0	0.0	0.20	1.04	0.0		
3	0.15S	0.14S	0.17	0.0	0.0	0.92	0.0	0.0	0.56	0.0	0.0	0.20		
4	0.19S	0.0	0.75	0.0	0.05	0.0	0.0	0.0	0.21	0.0	0.0	0.0		
5	0.05S	0.0	0.0	0.0	0.02E	0.35	0.0	0.0	0.0	0.0	0.0	0.0		
6	0.06S	0.0	0.0	0.17E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
7	0.10S	0.15S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
8	0.0	0.12	0.0	0.0	0.0	0.0	1.09	0.0	0.10	0.0	0.0	0.0		
9	0.0	0.23	0.01S	0.0	0.0	0.0	0.22E	0.10	0.0	0.0	0.0	0.0		
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.35	0.15	0.0		
11	0.13S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.23	0.0	0.47		
12	0.0	0.04S	0.42S	0.0	0.65	0.13	0.0	0.0	0.0	0.22	0.07	0.63		
13	0.0	0.03S	0.24S	0.50	1.04	0.0	0.0	0.0	0.0	0.14	0.0	0.07		
14	0.0	0.0	0.11S	0.05	0.0	0.0	0.0	0.0	0.0	0.16	0.51	0.0		
15	0.0	0.30M	0.03S	0.0	0.0	0.0	0.23	0.0	0.0	0.0	0.14	0.0		
16	0.0	0.0	0.05S	0.0	0.33	0.07E	0.0	0.05	0.0	0.0	0.0	0.20		
17	0.07E	0.0	0.21S	0.0	0.0	1.35	0.0	0.0	0.0	0.0	0.0	0.05		
18	0.07S	0.0	0.09S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
19	0.0	0.0	0.15	0.25	0.0	0.0	0.07	0.01E	0.0	0.0	0.0	0.0		
20	0.03S	0.0	0.08S	0.55	0.0	0.0	0.39	0.0	0.0	0.05	0.20	0.0		
21	0.0	0.0	0.0	0.0	0.0	0.43	0.0	0.0	0.17	0.36	0.0	0.10S		
22	0.0	0.0	0.41S	0.0	0.0	0.0	0.0	0.25	0.0	0.0	0.0	0.45		
23	0.0	0.0	0.0	0.09	0.0	0.0	0.10	0.0	0.0	0.0	0.0	0.09S		
24	0.0	0.0	0.0	1.70	0.55	0.0	0.0	0.0	0.09	0.0	0.0	0.0		
25	0.06E	0.0	0.18	0.0	0.40	0.02E	0.0	0.0	1.66	0.0	0.0	0.05S		
26	0.07M	0.0	0.10	0.0	0.0	0.33	0.0	0.0	0.75	0.0	0.0	0.0		
27	0.11S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.32	0.0	0.06S	0.05S		
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.06	0.0		
29	1.06		0.18S	0.0	0.0	0.04E	0.25	0.0	0.0	0.44	0.30	0.0		
30	0.0		0.0	0.0	0.0	0.0	0.42	0.0	0.0	0.50	0.0	0.0		
31	0.0		0.0		0.0		0.0			0.0		0.0		
TOTAL	2.43	1.64	3.28	5.27	3.51	3.64	2.77	0.41	3.86	3.65	2.53	2.36		
STA AV	2.63	2.09	3.17	3.25	3.68	4.08	4.45	2.71	2.64	2.13	2.38	2.17		

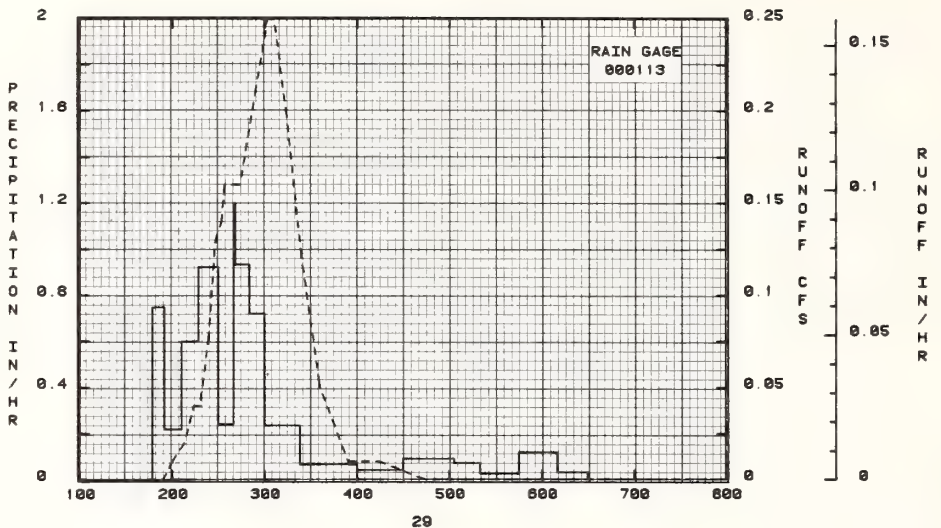
NOTES: For daily air temperatures in the vicinity, see table for Watershed W-95, p. 26.035-1. Precipitation amounts are for rain gage 113. STA AV based on 32 yr period, part-year records included.

1970 MEAN DAILY DISCHARGE (cfs) COSHOCTON, OHIO WATERSHED 106												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.0	0.0	0.0	0.003	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	0.0	0.0	0.0	0.013	0.0	0.0	0.0	0.0	0.0	0.0	0.002	0.0
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.002
13	0.0	0.0	0.0	0.0	0.001	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.0	0.0	0.0	0.0	0.002	0.0	0.0	0.0	0.0	0.0	0.0
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.0	0.002	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	0.0	0.0	0.0	0.011	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	0.010		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MEAN	0.0003	0.0	0.0	0.0010	0.0	0.0001	0.0	0.0	0.0	0.0	0.0001	0.0001
INCHES	0.145	0.0	0.0	0.445	0.012	0.027	0.0	0.0	0.0	0.0	0.027	0.037
STA AV	0.235	0.217	0.117	0.132	0.117	0.286	0.309	0.201	0.155	0.018	0.029	0.078

NOTES: To convert CFS to IN/DAY, multiply by 15.2575. STA AV based on 32 yr period, part-year records included.

1970 SELECTED RUNOFF EVENT COSHOCTON, OHIO WATERSHED 106											
ANTECEDENT CONDITIONS			RAINFALL				RUNOFF				
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.	
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)	
EVENT OF JANUARY 29, 1970											
1-29	RG 000113 0.0	0.0	1-29	RG 000113	0.0	0.0	1-29	144	0.0	0.0	
				147	0.7502	0.10		154	0.002	0.0031	
				206	0.2182	0.14		200	0.012	0.0005	
				217	0.5999	0.25		208	0.016	0.0017	
				230	0.9225	0.45		214	0.035	0.0033	
WATERSHED CONDITIONS:				240	0.2402	0.49		218	0.041	0.0049	
Legumes and grass.				241	1.2000	0.51		224	0.082	0.0088	
				252	0.9324	0.65		228	0.128	0.0132	
				300	0.7196	0.77		232	0.138	0.0188	
				323	0.2348	0.86		234	0.160	0.0220	
				400	0.0649	0.90		244	0.160	0.0389	
				430	0.0400	0.92		254	0.209	0.0585	
				503	0.0909	0.97		302	0.250	0.0779	
				520	0.0706	0.99		306	0.250	0.0885	
				545	0.0240	1.00		314	0.196	0.1074	
				610	0.1200	1.05		324	0.118	0.1240	
				630	0.0300	1.06		336	0.053	0.1349	
								354	0.012	0.1411	
								414	0.006	0.1430	
								444	0.002	0.1443	
								514	0.002	0.1449	
								544	0.0	0.1452	
								624	0.0	0.1452	

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.63572791.



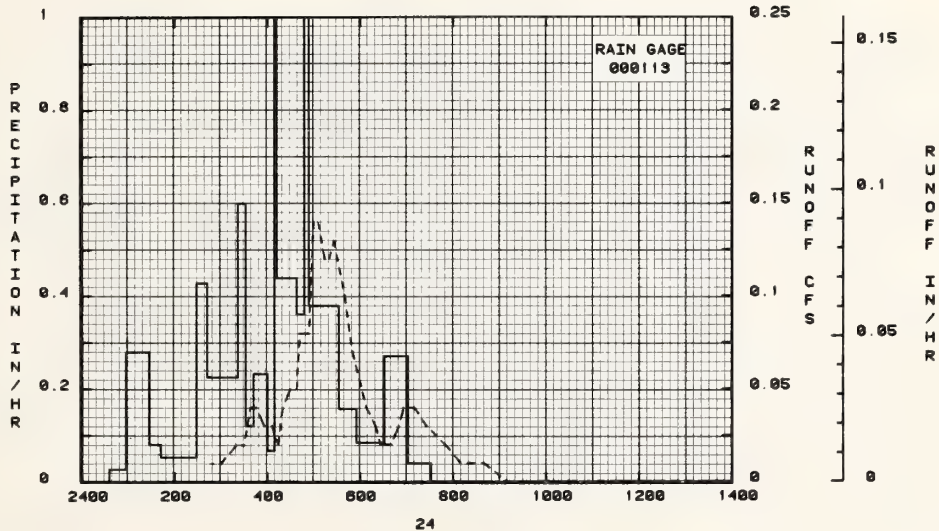
EVENT OF JANUARY 29, 1970
COSHOCTON, OHIO WATERSHED 106

1970			SELECTED RUNOFF EVENT			COSHOCTON, OHIO			WATERSHED 106		
ANTECEDENT CONDITIONS			RAINFALL			RUNOFF					
Date Mo-Day	Rainfall (inches)	Runoff (inches)	Date Mo-Day	Time of Day	Intensity (in/hr)	Acc. (inches)	Date Mo-Day	Time of Day	Rate (cfs)	Acc. (inches)	
EVENT OF APRIL 24, 1970											
4-24	RG 000113 0.05	0.000	4-24	35	0.0	0.0	4-24	246	0.009	0.0	
				57	0.0273	0.01		250	0.009	0.0004	
				127	0.2800	0.15		300	0.012	0.0015	
				142	0.0800	0.17		320	0.016	0.0045	
				228	0.0522	0.21		324	0.020	0.0053	
WATERSHED CONDITIONS: Legumes and grass.											
				242	0.4286	0.31		330	0.020	0.0066	
				322	0.2250	0.46		338	0.041	0.0092	
				332	0.6000	0.56		346	0.041	0.0127	
				342	0.1200	0.58		356	0.030	0.0165	
				400	0.2333	0.65		406	0.030	0.0197	
				409	0.0667	0.66		414	0.025	0.0220	
				412	1.0000	0.71		420	0.041	0.0241	
				438	0.4385	0.90		430	0.053	0.0291	
				446	0.3600	0.96		438	0.053	0.0336	
				454	1.0000	1.06		442	0.082	0.0365	
				532	0.3789	1.30		454	0.082	0.0469	
				555	0.1565	1.36		500	0.138	0.0539	
				631	0.0833	1.41		506	0.138	0.0627	
				702	0.2710	1.55		514	0.118	0.0735	
				732	0.0400	1.57		520	0.118	0.0810	
								526	0.128	0.0888	
								540	0.099	0.1056	
								550	0.074	0.1148	
								608	0.041	0.1258	
								620	0.030	0.1303	
								626	0.025	0.1320	
								640	0.025	0.1357	
								650	0.030	0.1386	
								656	0.041	0.1409	
								710	0.041	0.1470	
								726	0.030	0.1530	
								750	0.020	0.1594	
								810	0.012	0.1628	
								840	0.006	0.1657	
								910	0.004	0.1673	

NOTES: To convert runoff in CPS to IN/HR, multiply by 0.65372791.

1970 SELECTED RUNOFF EVENT			COSHOCTON, OHIO WATERSHED 106						
ANTECEDENT CONDITIONS			RAINFALL			RUNOFF			
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)
EVENT OF APRIL 24, 1970 (CONTINUED)									
							4-24	950	0.004
								1030	0.002
								1130	0.0
									0.1690
									0.1703
									0.1709

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.65372791.



EVENT OF APRIL 24, 1970
COSHOCTON, OHIO WATERSHED 106

COSHOCTON, OHIO WATERSHED 185

LOCATION: Coshocton Co., Ohio; 10 mi. NE of Coshocton; Walhonding River, Muskingum River Basin.

AREA: 7.40 acres

MONTHLY PRECIPITATION AND RUNOFF (inches)														COSHOCTON, OHIO WATERSHED 185													
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual													
1970	P	2.54	1.70	3.39	5.56	3.42	3.68	2.99	0.42	0.0	0.0	0.0	0.0	23.70													
	Q	0.424	0.104	0.062	0.551	0.062	0.091	0.006	0.0	0.004	0.0	0.022	0.059	1.386													
STA AV	P	2.69	2.14	3.23	3.29	3.74	3.86	4.25	2.74	2.49	1.99	2.31	2.14	34.85													
	Q	0.150	0.213	0.324	0.144	0.114	0.258	0.221	0.108	0.127	0.046	0.019	0.051	1.776													
ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																											
		Maximum Discharge		1 Hour		2 Hours		Maximum Volume for Selected Time Interval		6 Hours		12 Hours		1 Day		2 Days		8 Days									
		Date	Rate	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.								
1970		1-25	0.300	1-29	0.187	1-29	0.257	1-29	0.316	1-28	0.353	1-28	0.383	1-27	0.388	1-25	0.489										
MAXIMUMS FOR PERIOD OF RECORD																											
		6-16	3.350	9-1	1.910	9-1	2.310	9-1	2.320	3-4	2.420	3-4	2.880	3-3	3.550	3-1	4.110										
		1946		1950		1950		1950		1963		1963		1963		1963											

NOTES: Watershed conditions: Cover of no-till corn. For map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1956-59, USDA Misc. Pub. 945, p. 26.23-5. For Geology description and map, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1962, USDA Misc. Pub. 1070, pp. 26.23-1 and 26.30-3. Precipitation data from rain gage 128. Precipitation and runoff records began Sept. 1939. For long-time precipitation records, see National Weather Service records at Coshocton, Ohio.

1970 DAILY PRECIPITATION (inches)														COSHOCTON, OHIO WATERSHED 185													
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec															
1	0.14S	0.0	0.0	0.97	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0															
2	0.14S	0.67	0.10	1.18	0.40	0.0	0.0	0.0	0.0	0.0	0.0	0.0															
3	0.15S	0.14S	0.23	0.0	0.0	1.00	0.0	0.0	0.0	0.0	0.0	0.0															
4	0.19S	0.0	0.76	0.0	0.05	0.0	0.0	0.0	0.0	0.0	0.0	0.0															
5	0.05S	0.0	0.0	0.0	0.02	0.33	0.0	0.0	0.0	0.0	0.0	0.0															
6	0.06S	0.0	0.0	0.10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0															
7	0.10S	0.15S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0															
8	0.0	0.13	0.0	0.0	0.0	0.0	0.0	1.07	0.0	0.0	0.0	0.0															
9	0.0	0.24	0.01S	0.0	0.0	0.0	0.0	0.38	0.14	0.0	0.0	0.0															
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0															
11	0.13S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0															
12	0.0	0.04S	0.42S	0.0	0.64	0.10	0.0	0.0	0.0	0.0	0.0	0.0															
13	0.0	0.33S	0.24S	0.51	1.06	0.0	0.0	0.0	0.0	0.0	0.0	0.0															
14	0.0	0.0	0.11S	0.05E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0															
15	0.0	0.30M	0.03S	0.0	0.0	0.0	0.21	0.0	0.0	0.0	0.0	0.0															
16	0.0	0.0	0.05S	0.0	0.30	0.0	0.0	0.06	0.0	0.0	0.0	0.0															
17	0.07E	0.0	0.21S	0.0	0.0	1.43	0.0	0.0	0.0	0.0	0.0	0.0															
18	0.07S	0.0	0.09S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0															
19	0.0	0.0	0.15	0.30	0.0	0.0	0.05	0.0	0.0	0.0	0.0	0.0															
20	0.03S	0.0	0.08S	0.55	0.0	0.0	0.43	0.0	0.0	0.0	0.0	0.0															
21	0.0	0.0	0.0	0.0	0.0	0.49	0.0	0.0	0.0	0.0	0.0	0.0															
22	0.0	0.0	0.41S	0.0	0.0	0.0	0.0	0.22	0.0	0.0	0.0	0.0															
23	0.0	0.0	0.0	0.08	0.0	0.0	0.09	0.0	0.0	0.0	0.0	0.0															
24	0.0	0.0	0.0	1.82	0.59	0.0	0.0	0.0	0.0	0.0	0.0	0.0															
25	0.06E	0.0	0.25	0.0	0.36	0.0	0.0	0.0	0.0	0.0	0.0	0.0															
26	0.07M	0.0	0.07	0.0	0.0	0.26	0.0	0.0	0.0	0.0	0.0	0.0															
27	0.11S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0															
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0															
29	1.17		0.18S	0.0	0.0	0.07	0.25	0.0	0.0	0.0	0.0	0.0															
30	0.0		0.0	0.0	0.0	0.0	0.51	0.0	0.0	0.0	0.0	0.0															
31	0.0		0.0		0.0		0.0	0.0																			
TOTAL	2.54	1.70	3.39	5.56	3.42	3.68	2.99	0.42	0.0	0.0	0.0	0.0															
STA AV	2.69	2.14	3.23	3.29	3.74	3.86	4.25	2.74	2.49	1.99	2.31	2.14															

NOTES: For daily air temperatures in the vicinity, see table for Watershed W-95, p. 26.035-1. Precipitation amounts are for rain gage 128. STA AV based on 32 yr period, part-year records included.

1970 MEAN DAILY DISCHARGE (cfs) COSHOCTON, OHIO WATERSHED 185												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.0	0.0	0.0	0.012	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	0.0	0.021	0.0	0.079	0.0	0.0	0.0	0.0	0.0	0.0	0.007	0.0
3	0.0	0.0 T	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4	0.0	0.0	0.019	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.0	0.002	0.0	0.0	0.0	0.0	0.0	0.0
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8	0.0	0.001	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9	0.0	0.010	0.0	0.0	0.0	0.0	0.002	0.0	0.0	0.0	0.0	0.0
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.008
13	0.0	0.0	0.0	0.0	0.019	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.0	0.0	0.0	0.0	0.026	0.0	0.0	0.0	0.0	0.0	0.0
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.0	0.003	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.011
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	0.0	0.0	0.0	0.036	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.006	0.0	0.0	0.0	0.0 T	0.0	0.0	0.0	0.001	0.0	0.0	0.0
26	0.005	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	0.015	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	0.105E		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MEAN	0.0043	0.0012	0.0006	0.0057	0.0006	0.0009	0.0001	0.0	0.0	0.0	0.0002	0.0006
INCHES	0.424	0.104	0.062	0.551	0.062	0.091	0.006	0.0	0.004	0.0	0.022	0.059
STA AV	0.150	0.213	0.324	0.144	0.114	0.258	0.221	0.108	0.127	0.046	0.019	0.051

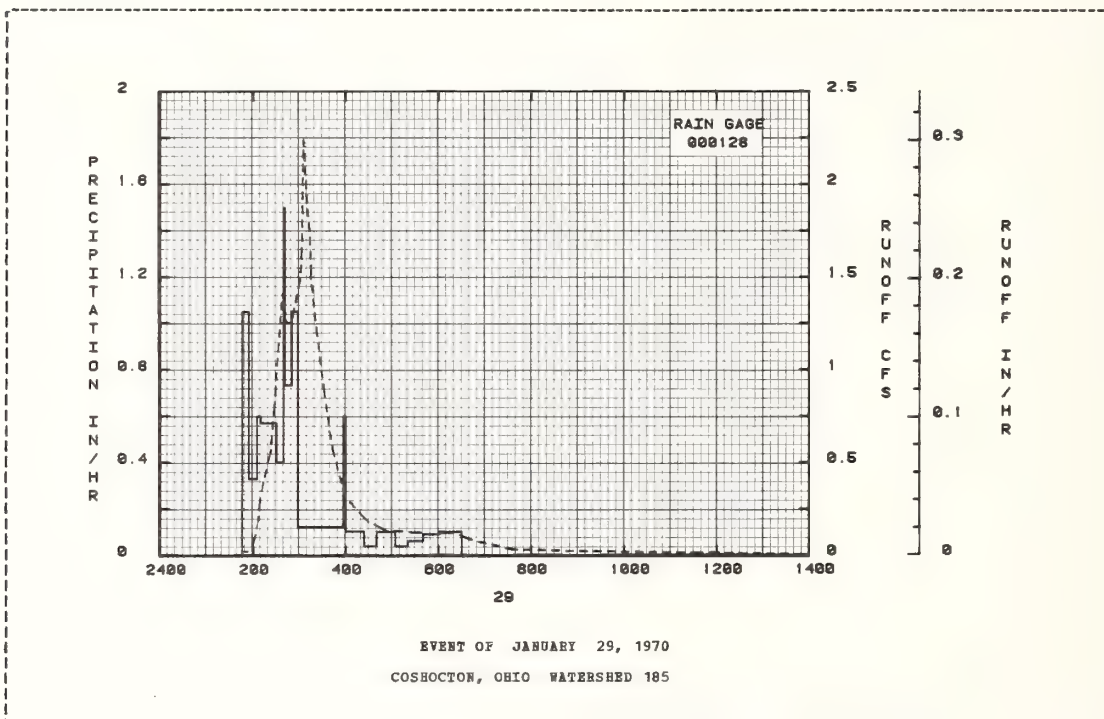
NOTES: To convert CPS to IN/DAY, multiply by 3.2164. STA AV based on 32 yr period, part-year records included.

1970 SELECTED RUNOFF EVENT COSHOCTON, OHIO WATERSHED 185									
ANTECEDENT CONDITIONS			RAINFALL			RUNOFF			
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)
EVENT OF JANUARY 29, 1970									
RG 000128			RG 000128						
1-29	0.0	0.005	1-29	146	0.0	0.0	1-29	149	0.015
				154	1.0503	0.14		153	0.021
				205	0.3272	0.20		159	0.050
				210	0.6006	0.25		203	0.107
				230	0.5697	0.44		207	0.211
WATERSHED CONDITIONS: Idle corn field of chopped stalks.				239	0.4003	0.50		209	0.311
				241	1.5000	0.55		213	0.388
				250	0.7326	0.66		223	0.570
				258	1.0503	0.80		227	0.786
				357	0.1220	0.92		229	0.908
				400	0.5994	0.95		233	1.140
				424	0.1000	0.99		238	1.410
				440	0.0375	1.00		243	1.250
				504	0.1000	1.04		249	1.250
				520	0.0375	1.05		253	1.330
				540	0.0600	1.07		301	1.490
				600	0.0900	1.10		303	1.660
				630	0.1000	1.15		305	2.240
								309	1.940
								313	1.750
								315	1.490
								323	1.180
								333	0.846
								343	0.570
								359	0.311
								429	0.182
								453	0.130
								513	0.130
								525	0.118
								537	0.118
								547	0.107
								553	1.107
								605	0.118
								619	0.118
								643	0.076

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.13401832.

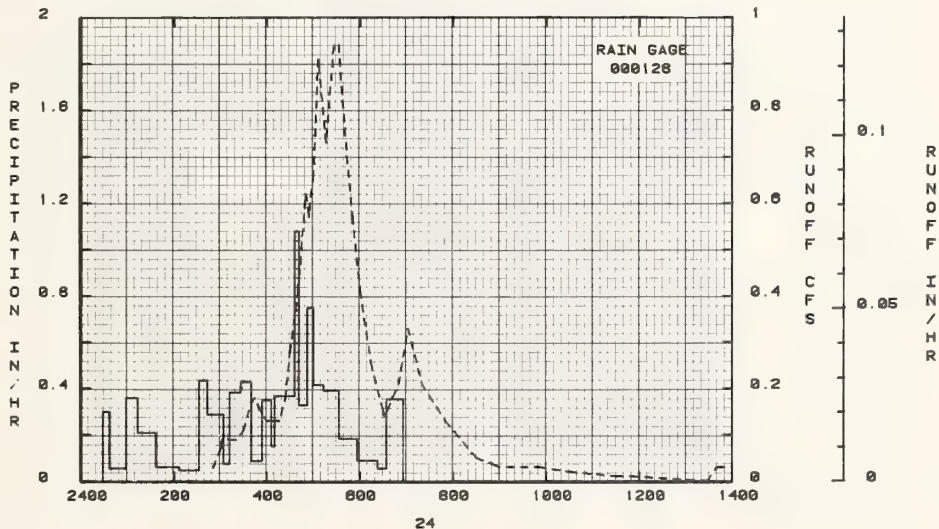
1970 SELECTED RUNOFF EVENT			COSHOCTON, OHIO WATERSHED 185							
ANTECEDENT CONDITIONS			RAINFALL				RUNOFF			
Date Mo-Day	Rainfall (inches)	Runoff (inches)	Date Mo-Day	Time of Day	Intensity (in/hr)	Acc. (inches)	Date Mo-Day	Time of Day	Rate (cfs)	Acc. (inches)
EVENT OF JANUARY 29, 1970 (CONTINUED)										
							1-29	733	0.034	0.3146
								903	0.021	0.3201
								1133	0.011	0.3255
								1203	0.011	0.3262
								1733	0.003	0.3314

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.13401832.



1970 SELECTED RUNOFF EVENT			COSHOCTON, OHIO WATERSHED 185							
ANTECEDENT CONDITIONS			RAINFALL				RUNOFF			
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)
EVENT OF APRIL 24, 1970										
RG 000128			RG 000128							
4-24	0.0	0.001	4-24	28	0.0	0.0	4-24	250	0.034	0.0
				36	0.3000	0.04		300	0.067	0.0011
				58	0.0545	0.06		302	0.086	0.0014
				113	0.3600	0.15		320	0.086	0.0049
				136	0.2087	0.23		330	0.107	0.0071
WATERSHED CONDITIONS: Idle corn field of chopped stalks.				206	0.0600	0.26		340	0.168	0.0102
				232	0.0462	0.28		344	0.182	0.0118
				243	0.4364	0.36		352	0.155	0.0148
				304	0.2857	0.46		400	0.130	0.0174
				312	0.0750	0.47		416	0.130	0.0220
				326	0.3857	0.56		424	0.182	0.0248
				340	0.4286	0.66		430	0.276	0.0279
				354	0.0857	0.68		440	0.409	0.0355
				406	0.3500	0.75		450	0.621	0.0470
				410	0.1500	0.76		454	0.570	0.0523
				436	0.3692	0.92		500	0.674	0.0606
				441	1.0800	1.01		506	0.908	0.0712
				452	0.3273	1.07		516	0.729	0.0895
				500	0.7500	1.17		526	0.940	0.1081
				513	0.4154	1.26		532	0.940	0.1207
				533	0.3900	1.39		540	0.757	0.1359
				556	0.1826	1.46		550	0.570	0.1507
				623	0.0889	1.50		600	0.409	0.1616
				634	0.0545	1.51		616	0.242	0.1732
				656	0.3545	1.64		632	0.142	0.1801
								650	0.211	0.1872
								702	0.330	0.1944
								720	0.211	0.2053
								750	0.130	0.2167
								830	0.050	0.2247
								900	0.034	0.2275
								936	0.027	0.2300
								950	0.034	0.2310
								1030	0.021	0.2335
								1130	0.011	0.2356

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.13401832.



EVENT OF APRIL 24, 1970
COSHOCTON, OHIO WATERSHED 185

COSHOCTON, OHIO WATERSHED 187

LOCATION: Coshocton Co., Ohio; 10 mi. NE of Coshocton; Walhonding River, Muskingum River Basin.

AREA: 7.20 acres

MONTHLY PRECIPITATION AND RUNOFF (inches)														COSHOCTON, OHIO WATERSHED 187										
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual										
1970	P	2.62	1.69	3.29	5.18	3.78	3.87	3.20	2.51	0.0	0.0	0.0	0.0	24.14										
	Q	1.240	0.348	0.042	2.466	0.034	0.011	0.0	0.0	0.0	0.0	0.0	0.006	4.146										
STA AV	P	2.70	2.18	3.32	3.30	3.85	4.06	4.47	2.72	2.67	2.06	2.36	2.16	35.85										
	Q	0.640	0.649	1.063	0.597	0.231	0.317	3.262	0.055	0.099	0.018	0.018	0.239	4.389										
ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																								
		Maximum Discharge Rate		1 Hour		2 Hours		Maximum Volume for Selected Time Interval																
		Date	Rate	Date	Vol.	Date	Vol.	6 Hours		12 Hours		1 Day		2 Days		8 Days								
								Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.							
1970		1-29	0.428	4-24	0.347	4-24	0.476	4-24	0.668	4-24	0.742	1-29	0.924	1-28	1.118	1-26	1.528							
MAXIMUMS FOR PERIOD OF RECORD																								
		6-12	2.750	9-1	1.370	9-1	1.540	9-1	1.570	3-4	2.010	3-4	2.350	3-4	2.950	7-5	3.528							
		1957		1950		1950		1950		1963		1963		1963		1969								

NOTES: Watershed conditions: From strip cropping to no plow corn. For map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1956-59, USDA Misc. Pub. 945, p. 26.24-5. For Geology description and map, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1962, USDA Misc. Pub. 1070, pp. 26.24-1 and 26.30-3. Precipitation data from rain gage 116. Precipitation and runoff records began Jan. 1941. For long-time precipitation records, see National Weather Service records at Coshocton, Ohio.

1970 DAILY PRECIPITATION (inches)													COSHOCTON, OHIO WATERSHED 187	
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
1	0.14S	0.0	0.0	0.81	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
2	0.14S	0.65	0.10	1.09	0.45	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
3	0.15S	0.14S	0.20	0.0	0.0	0.98	0.0	0.0	0.0	0.0	0.0	0.0		
4	0.19S	0.0	0.76	0.0	0.07	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
5	0.05S	0.0	0.0	0.0	0.06	0.35	0.0	0.0	0.0	0.0	0.0	0.0		
6	0.06S	0.0	0.0	0.15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
7	0.10S	0.15S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
8	0.0	0.14	0.0	0.0	0.0	0.0	1.14	0.0	0.0	0.0	0.0	0.0		
9	0.0	0.24	0.01S	0.0	0.0	0.0	0.33	0.15	0.0	0.0	0.0	0.0		
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
11	0.13S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
12	0.0	0.04S	0.42S	0.0	0.65	0.10	0.0	0.0	0.0	0.0	0.0	0.0		
13	0.0	0.03S	0.24S	0.44	1.25	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
14	0.0	0.0	0.11S	0.05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
15	0.0	0.30M	0.03S	0.0	0.0	0.0	0.21	0.0	0.0	0.0	0.0	0.0		
16	0.0	0.0	0.05S	0.0	0.34	0.05	0.0	0.11	0.0	0.0	0.0	0.0		
17	0.07E	0.0	0.21S	0.0	0.0	1.48	0.0	0.0	0.0	0.0	0.0	0.0		
18	0.07S	0.0	0.09S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
19	0.0	0.0	0.11	0.29	0.0	0.0	0.05	0.02	0.0	0.0	0.0	0.0		
20	0.03S	0.0	0.08S	0.45	0.0	0.0	0.45	0.0	0.0	0.0	0.0	0.0		
21	0.0	0.0	0.0	0.0	0.0	0.55	0.0	0.0	0.0	0.0	0.0	0.0		
22	0.0	0.0	0.41S	0.0	0.0	0.0	0.0	0.23	0.0	0.0	0.0	0.0		
23	0.0	0.0	0.0	0.07	0.0	0.0	0.11E	0.0	0.0	0.0	0.0	0.0		
24	0.0	0.0	0.0	1.83	0.54	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
25	0.06E	0.0	0.22	0.0	0.42	0.02E	0.0	0.0	0.0	0.0	0.0	0.0		
26	0.07M	0.0	0.07	0.0	0.0	0.31	0.0	0.0	0.0	0.0	0.0	0.0		
27	0.11S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
29	1.25	0.0	0.18S	0.0	0.0	0.03E	0.45	0.0	0.0	0.0	0.0	0.0		
30	0.0	0.0	0.0	0.0	0.0	0.0	0.46	0.0	0.0	0.0	0.0	0.0		
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
TOTAL	2.62	1.69	3.29	5.18	3.78	3.87	3.20	0.51	0.0	0.0	0.0	0.0		
STA AV	2.70	2.18	3.32	3.30	3.85	4.06	4.47	2.72	2.67	2.06	2.36	2.16		

NOTES: For daily air temperatures in the vicinity, see table for Watershed W-95, p. 26.035-1. Precipitation amounts are for rain gage 116. STA AV based on 30 yr period.

1970 MEAN DAILY DISCHARGE (cfs) COSHOCTON, OHIO WATERSHED 187												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.0	0.0097	0.0	0.010	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	0.0	0.043	0.0	0.194	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3	0.0	0.012	0.0	0.087	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4	0.0	0.0	0.009	0.050	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	0.0	0.0	0.003E	0.024	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6	0.0	0.0	0.0	0.006	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9	0.0	0.004	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13	0.0	0.0	0.0	0.0	0.007	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.0	0.0	0.0	0.0	0.033	0.0	0.0	0.0	0.0	0.0	0.0
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.0	0.002	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.002
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	0.0	0.0	0.0	0.0246E	0.001	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.004	0.0	0.0	0.050	0.002	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	0.010	0.0	0.0	0.042	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	0.003	0.0	0.0	0.018	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	0.020	0.0	0.0	0.011	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	0.028	0.0	0.0	0.004	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	0.060	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	0.038	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MEAN	0.0121	0.0038	0.0004	0.0249	0.0003	0.0001	0.0	0.0	0.0	0.0	0.0	0.0001
INCHES	1.240	0.348	0.042	2.466	0.034	0.011	0.0	0.0	0.0	0.0	0.0	0.006
STA AV	0.840	0.649	1.063	0.597	0.231	0.317	0.262	0.055	0.099	0.018	0.018	0.239

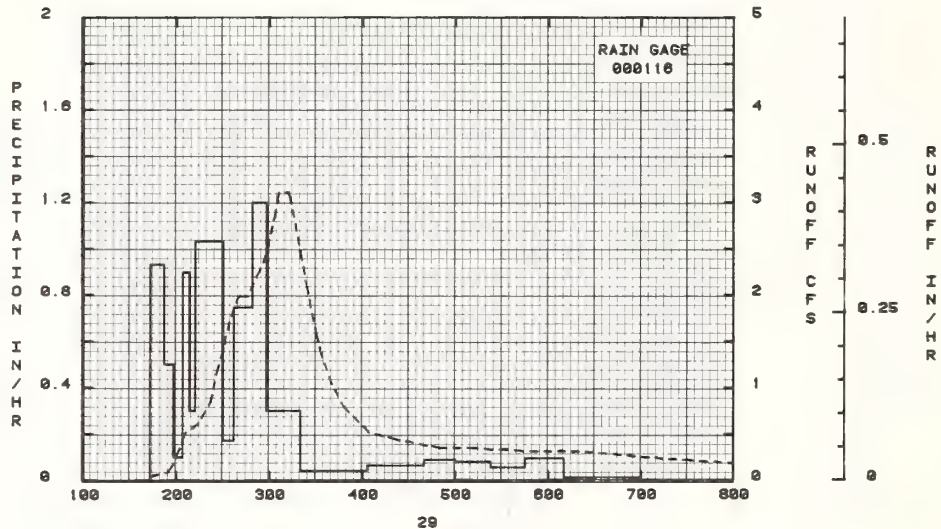
NOTES: To convert CPS to IN/DAY, multiply by 3.3058. STA AV based on 30 yr period.

1970 SELECTED RUNOFF EVENT COSHOCTON, OHIO WATERSHED 187												
ANTECEDENT CONDITIONS			RAINFALL									
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Runoff	Rate	Acc.	
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)		(inches)	
EVENT OF JANUARY 29, 1970												
EG 000116			EG 000116									
1-29	0.0	0.013	1-29	143	0.0	0.0	1-29	144	0.050	0.0		
				152	0.9439	0.14		154	0.086	0.0016		
				158	0.4995	0.19		158	0.182	0.0028		
				204	0.0999	0.20		202	0.349	0.0052		
				208	0.9002	0.26		206	0.521	0.0092		
WATERSHED CONDITIONS:												
Idle corn field of chopped stalks.												
				212	0.3001	0.28		214	0.621	0.0197		
				230	1.0332	0.59		222	0.846	0.0332		
				237	0.1717	0.61		226	1.180	0.0425		
				249	0.7493	0.76		230	1.410	0.0584		
				258	1.2008	0.94		234	1.710	0.0687		
				320	0.3000	1.05		240	1.990	0.0941		
				403	0.0419	1.08		246	1.590	0.1215		
				440	0.0649	1.12		254	2.290	0.1608		
				500	0.0900	1.15		258	2.450	0.1826		
				523	0.0783	1.18		304	2.920	0.2196		
				545	0.0545	1.20		306	3.110	0.2334		
				610	0.0960	1.24		312	3.110	0.2763		
				700	0.0120	1.25		314	2.990	0.2902		
								320	2.450	0.3277		
								324	2.090	0.3485		
								330	1.580	0.3738		
								334	1.330	0.3872		
								340	1.040	0.4035		
								348	0.786	0.4203		
								404	0.521	0.4443		
								424	0.430	0.4661		
								450	0.349	0.4893		
								510	0.349	0.5053		
								524	0.330	0.5162		
								534	0.330	0.5238		
								544	0.311	0.5312		
								620	0.311	0.5569		
								714	0.226	0.5902		
								734	0.211	0.6002		
								924	0.182	0.6498		

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.13774104.

1970 SELECTED RUNOFF EVENT			COSHOCTON, OHIO WATERSHED 187					
ANTECEDENT CONDITIONS			RAINFALL			RUNOFF		
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day
							Rate	Acc.
							(cfs)	(inches)
EVENT OF JANUARY 29, 1970 (CONTINUED)								
							1-29	1214
								2400
								0.142
								0.096
								0.7130
								0.9059

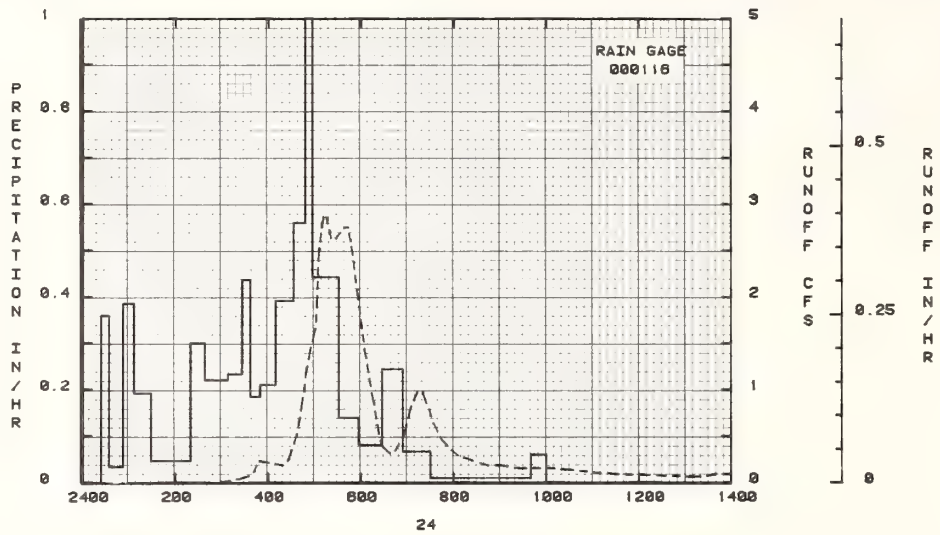
NOTES: To convert runoff in CFS to IN/HR, multiply by 0.13774104.



EVENT OF JANUARY 29, 1970
COSHOCTON, OHIO WATERSHED 187

1970 SELECTED RUNOFF EVENT			COSHOCTON, OHIO WATERSHED 187							
ANTECEDENT CONDITIONS			RAINFALL				RUNOFF			
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)
EVENT OF APRIL 24, 1970										
RG 000116			RG 000116							
4-24	0.0	0.000	4-24	24	0.0	0.0	4-24	259	0.011	0.0
				34	0.3600	0.06		311	0.021	0.0004
				52	0.0333	0.07		327	0.050	0.0017
				106	0.3857	0.16		335	0.067	0.0028
				128	0.1909	0.23		341	0.107	0.0040
WATERSHED CONDITIONS: Idle corn field of chopped stalks.				220	0.0462	0.27		345	0.182	0.0053
				238	0.3000	0.36		349	0.226	0.0072
				308	0.2200	0.47		401	0.211	0.0132
				326	0.2333	0.54		419	0.182	0.0213
				337	0.4364	0.62		425	0.226	0.0241
				350	0.1846	0.66		431	0.349	0.0281
				419	0.2100	0.73		437	0.521	0.0341
				433	0.3913	0.88		441	0.701	0.0357
				448	0.5600	1.02		445	0.908	0.0471
				457	1.0000	1.17		449	1.180	0.0567
				531	0.4412	1.42		455	1.450	0.0748
				557	0.1385	1.48		501	1.660	0.0962
				627	0.0800	1.52		503	1.940	0.1044
				654	0.2444	1.63		505	2.450	0.1145
				730	0.0667	1.67		511	2.860	0.1510
				940	0.0092	1.69		515	2.860	0.1774
				1000	0.0600	1.71		521	2.630	0.2152
								527	2.630	0.2515
								539	2.750	0.3256
								543	2.750	0.3508
								549	2.450	0.3866
								555	2.040	0.4175
								601	1.660	0.4430
								605	1.410	0.4571
								611	1.110	0.4744
								615	0.908	0.4837
								623	0.521	0.4968
								627	0.388	0.5010
								637	0.311	0.5090
								645	0.349	0.5151
								655	0.497	0.5248
								659	0.621	0.5299
								705	0.816	0.5398
								713	0.973	0.5562
								720	0.973	0.5718
								725	0.846	0.5822
								735	0.621	0.5990
								745	0.452	0.6113
								805	0.293	0.6284
								825	0.226	0.6403
								845	0.182	0.6497
								901	0.182	0.6564
								925	0.155	0.6657
								1011	0.155	0.6821
								1035	0.130	0.6900
								1125	0.086	0.7024
								1205	0.076	0.7098
								1235	0.067	0.7147
								1310	0.058	0.7197
								1320	0.058	0.7210
								1340	0.086	0.7243
								1406	0.086	0.7294
								1416	0.096	0.7315
								1430	0.086	0.7344
								1500	0.067	0.7397
								2400	0.050	0.8122

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.13774104.



COSHOCTON, OHIO WATERSHED 196

LOCATION: Coshocton Co., Ohio; 10 mi. NE of Coshocton; Walhonding River, Muskingum River Basin.

AREA: 303.00 acres

MONTHLY PRECIPITATION AND RUNOFF (inches)														COSHOCTON, OHIO WATERSHED 196												
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual												
1970	P	2.49	1.76	3.38	5.48	3.41	3.61	3.16	0.48	3.67	3.62	2.83	2.56	36.47												
	Q	1.884	1.866	1.961	4.527	1.072	0.382	0.177	0.066	0.122	0.221	0.716	1.656	14.650												
STA AV	P	2.70	2.36	3.52	3.44	3.79	4.29	4.43	2.73	2.65	2.22	2.50	2.31	36.95												
	Q	1.750	1.890	2.840	2.368	1.484	1.038	0.726	0.283	0.228	0.205	0.403	0.967	14.182												
ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																										
		Maximum Discharge		1 Hour		2 Hours		Maximum Volume for Selected Time Interval		12 Hours		1 Day		2 Days		8 Days										
		Date	Rate	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.									
1970		1-29	0.524	1-29	0.393	1-29	0.556	1-29	0.834	4- 1	1.083	4- 1	1.318	4- 1	1.548	1-28	2.172									
MAXIMUMS FOR PERIOD OF RECORD																										
		6-12	3.720	6-12	1.310	6-12	1.440	7- 5	2.106	7- 5	2.453	1-21	2.920	1-20	3.210	3- 4	4.630									
		1957		1957		1957		1969		1969		1959		1959		1964										

NOTES: Watershed conditions: Woods, 27%; grassland, 50%; miscellaneous, 23%; watershed in improved practice. For map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1956-59, USDA Misc. Pub. 945, p. 26.30-5. For Geology description and map, see Hydrologic Data for Experimental Agricultural Watershed in the United States, 1962, USDA Misc. Pub. 1070, pp. 26.30-1 and 26.30-3. Precipitation data from rain gages 108 and 107. Precipitation and runoff records began May 1937. For long-time precipitation records, see National Weather Service records at Coshocton, Ohio.

1970 DAILY PRECIPITATION (inches)														COSHOCTON, OHIO WATERSHED 196											
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec													
1	0.14S	0.0	0.0	0.89	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0													
2	3.14S	0.70	0.10	1.18	0.42	0.0	0.0	0.0	0.0	0.20	1.05	0.0													
3	3.15S	3.14S	0.23	0.0	0.0	0.92	0.0	0.0	0.57	0.0	0.0	0.29													
4	0.19S	0.0	0.76	0.0	0.07	0.0	0.0	0.0	0.19	0.0	0.0	0.0													
5	0.05S	0.0	0.0	0.0	0.028	0.32	0.0	0.0	0.0	0.0	0.0	0.0													
6	0.06S	0.0	0.0	0.15E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0													
7	0.10S	0.15S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0													
8	0.0	0.14	0.0	0.0	0.0	0.0	1.11	0.0	0.03	0.0	0.0	0.0													
9	0.0	0.25	0.01S	0.0	0.0	0.0	0.22	0.15	0.0	0.0	0.0	0.0													
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.31	0.13	0.0													
11	0.13S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.19	0.0	0.44													
12	0.0	0.04S	0.42S	0.0	0.60	0.10	0.0	0.0	0.0	0.21	0.13	0.62													
13	0.0	0.03S	0.24S	0.44	1.02	0.0	0.0	0.0	0.0	0.16	0.0	0.11													
14	0.0	0.0	0.11S	0.08	0.0	0.0	0.0	0.0	0.0	0.15	0.63	0.0													
15	0.0	0.30M	0.03S	0.0	0.0	0.0	0.28	0.0	0.0	0.0	0.15	0.0													
16	0.0	0.0	0.05S	0.0	0.34	0.10	0.0	0.11	0.0	0.0	0.0	0.25													
17	0.07E	0.0	0.21S	0.0	0.0	1.36	0.0	0.0	0.0	0.0	0.0	0.06													
18	0.07S	0.0	0.09S	0.0	0.0	0.00E	0.0	0.0	0.0	0.0	0.0	0.0													
19	0.0	0.0	0.13	0.22	0.0	0.0	0.07	0.01E	0.0	0.0	0.0	0.0													
20	0.03S	0.0	0.08S	0.58	0.0	0.0	0.38	0.0	0.0	0.05	0.23	0.0													
21	0.0	0.0	0.0	0.0	0.0	0.44	0.0	0.0	0.09	0.41	0.0	0.15S													
22	0.0	0.0	0.41S	0.0	0.0	0.0	0.0	0.20	0.0	0.0	0.0	0.49													
23	0.0	0.0	0.0	0.07	0.02E	0.0	0.08	0.0	0.0	0.0	0.0	0.07S													
24	0.0	0.0	0.0	1.86	0.46	0.0	0.0	0.0	0.06	0.0	0.0	0.0													
25	2.96E	0.0	0.22	0.0	0.45	0.0	0.0	0.0	1.73	0.0	0.0	0.04S													
26	0.07M	0.0	0.09	0.0	0.0	0.33	0.0	0.0	0.70	0.0	0.0	0.0													
27	0.11S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.29	0.0	0.07S	0.04S													
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.07	0.0													
29	1.12	0.0	0.18S	0.0	0.0	0.02	0.57	0.0	0.0	0.41	0.37	0.0													
30	0.0	0.0	0.0	0.0	0.0	0.0	0.42	0.0	0.0	0.51	0.0	0.0													
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0													
TOTAL	2.49	1.76	3.38	5.48	3.41	3.61	3.16	0.48	3.67	3.62	2.83	2.56													
STA AV	2.70	2.36	3.52	3.44	3.79	4.29	4.43	2.73	2.65	2.22	2.50	2.31													

NOTES: For daily air temperatures in the vicinity, see table for Watershed W-95, p. 26.035-1. Precipitation amounts are for rain gages 107 and 108. STA AV based on 34 yr period, part-year records included.

1970 MEAN DAILY DISCHARGE (cfs) COSHOCTON, OHIO WATERSHED 196												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.261	1.000	0.190	2.035	0.579	0.098	0.054	0.052	0.014	0.024	0.106	0.299
2	0.261	4.539	0.207	15.738	0.766	0.101	0.053	0.042	0.011	0.034	1.475	0.261
3	0.251	1.877	0.623	2.835	0.565	0.488	0.050E	0.042	0.019	0.033	0.642	0.360
4	0.226	1.355	3.450	1.725	0.472	0.175	0.050E	0.037	0.047	0.024	0.362	0.395
5	0.210	0.976	1.664	1.270	0.452	0.319	0.050E	0.030	0.034	0.024	0.272	0.318
6	0.203	0.780	1.055	1.140	0.394	0.141	0.050E	0.031	0.026	0.024	0.204	0.299
7	0.196	0.746	0.859	0.938	0.327	0.112	0.044	0.028	0.028	0.024	0.165	0.261
8	0.172	0.885	0.746	0.780	0.299	0.101	0.354	0.026	0.025	0.024	0.138	0.234
9	0.148	3.095	0.599	0.678	0.261	0.386	0.236	0.035	0.020	0.024	0.123	0.218
10	0.143	1.470	0.517	0.565	0.226	0.083	0.100	0.039	0.018	0.047	0.145	0.196
11	0.133	1.055	0.477	0.489	0.210	0.079	0.066	0.028	0.017	0.733	0.119	0.392
12	0.123	0.842	0.452E	0.452	0.418	0.171	0.058	0.026	0.016	0.092	0.134	3.104
13	0.123	0.661	0.452	0.672	2.825	0.088	0.050	0.026	0.016	0.194	0.124	1.215
14	0.123	0.545	0.385	0.745	0.775	0.079	0.045	0.026	0.015	0.094	0.393	0.896
15	0.114	0.517	0.280	0.596	0.523	0.073	0.066	0.017	0.014	0.086	0.789	0.745
16	0.110	0.477	0.261	0.517	0.636	0.079	0.054	0.020	0.014	0.056	0.394	0.866
17	0.201	0.452	0.308	0.466	0.505	1.117	0.039	0.029	0.013	0.046	0.339	0.855
18	0.323	0.429	0.471	0.417	0.417	0.282	0.036	0.024	0.012	0.042	0.299	0.661
19	0.203	0.383	0.917	0.543	0.360	0.107	0.047	0.024	0.012	0.040	0.261	0.565
20	0.180	0.301	1.024	2.273	0.308	0.087	0.092	0.026	0.012	0.042	0.352	0.477
21	0.123	0.261	0.780	0.890	0.261	0.246	0.048	0.024	0.012	0.110	0.262	0.452
22	0.085	0.308	0.989	0.733	0.226	0.115	0.037	0.028	0.013	0.075	0.218	2.158
23	0.085	0.281	1.017	0.633	0.203	0.084	0.034	0.031	0.014	0.056	0.184	1.347
24	0.088	0.253	0.900	12.837	0.247	0.074	0.033	0.026	0.016	0.048	0.158	0.993
25	0.142	0.231	0.958	2.446	0.429	0.072	0.029	0.023	0.068	0.046	0.164	0.746
26	0.531	0.196	1.374	1.542	0.285	0.116	0.029	0.016	0.132	0.044	0.190	0.644
27	0.319	0.128	0.976	1.163	0.170	0.089	0.030	0.019	0.219	0.042	0.196	0.548
28	1.057	0.108	0.834	1.001	0.148	0.067	0.030	0.018	0.039	0.040	0.170	0.466
29	14.530E		0.822	0.817	0.128	0.067	0.143	0.013	0.028	0.067	0.364	0.410
30	2.998		0.729	0.695	0.118	0.360	0.180	0.013	0.025	0.421	0.374	0.371
31	1.310		0.644		0.110		0.064E	0.016		0.163		0.327
MEAN	0.7736	0.8483	0.8052	1.9211	0.4403	0.1620	0.0725	0.0271	0.0517	0.0909	0.3039	0.6800
INCHES	1.884	1.866	1.961	4.527	1.072	0.382	0.177	0.066	0.122	0.221	0.716	1.656
STA AV	1.750	1.890	2.840	2.368	1.484	1.038	0.726	0.283	0.228	0.205	0.403	0.967

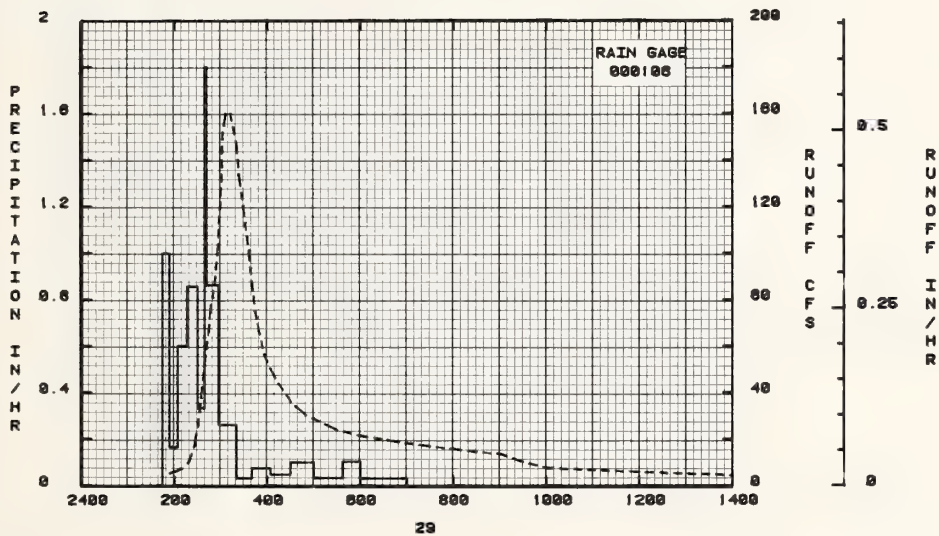
NOTES: To convert CPS to IN/DAY, multiply by 0.0786. STA AV based on 34 yr period, part-year records included.

1970			SELECTED RUNOFF EVENT			COSHOCTON, OHIO			WATERSHED 156		
ANTECEDENT CONDITIONS			RAINFALL			RUNOFF					
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.	
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)	
EVENT OF JANUARY 29, 1970											
RG 000108			RG 000108								
1-29	0.0	0.029	1-29	144	0.0	0.0	1-29	154	5.400	0.0	
				153	1.0000	0.15		210	7.500	0.0056	
				204	0.1636	0.18		218	10.200	0.0095	
				216	0.6001	0.30		222	13.600	0.0121	
				230	0.8569	0.50		226	17.800	0.0155	
WATERSHED CONDITIONS:				239	0.3336	0.55		228	22.400	0.0177	
Woods, 27%; grassland, 50%;				241	1.8000	0.61		230	25.700	0.0203	
miscellaneous, 23%; watershed				257	0.8619	0.84		232	31.900	0.0234	
in improved practice.				320	0.2609	0.94		236	42.500	0.0315	
				340	0.9300	0.95		240	56.000	0.0422	
				404	0.0750	0.98		244	66.400	0.0556	
				430	0.0462	1.00		246	75.000	0.0633	
				500	0.1000	1.05		252	87.200	0.0898	
				537	0.0324	1.07		256	104.000	0.1107	
				600	0.1043	1.11		300	128.000	0.1361	
				700	0.0300	1.14		302	152.000	0.1513	
								306	160.000	0.1853	
								312	169.000	0.2377	
								320	186.000	0.3045	
								324	132.000	0.3348	
								330	116.000	0.3754	
								336	100.000	0.4107	
								340	87.200	0.4311	
								344	75.000	0.4488	
								350	65.100	0.4718	
								356	56.000	0.4916	
								410	46.200	0.5306	
								430	36.100	0.5755	
								450	30.200	0.6117	
								530	23.900	0.6707	
								600	21.400	0.7078	
								650	18.700	0.7625	
								730	16.900	0.8013	
								810	15.200	0.8363	
								830	14.400	0.8525	

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.00327305.

1970	SELECTED RUNOFF EVENT					COSHOCTON, OHIO WATERSHED 196					
ANTECEDENT CONDITIONS			RAINFALL			RUNOFF					
Date Mo-Day	Rainfall (inches)	Runoff (inches)	Date Mo-Day	Time of Day	Intensity (in/hr)	Acc. (inches)	Date Mo-Day	Time of Day	Rate (cfs)	Acc. (inches)	
EVENT OF JANUARY 29, 1970 (CONTINUED)											
							1-29	900	13.600	0.8754	
								930	10.200	0.8949	
								1000	7.500	0.9094	
								1200	5.780	0.9529	
								1600	4.300	1.0189	
								1930	3.620	1.0643	
								2400	2.860	1.1120	

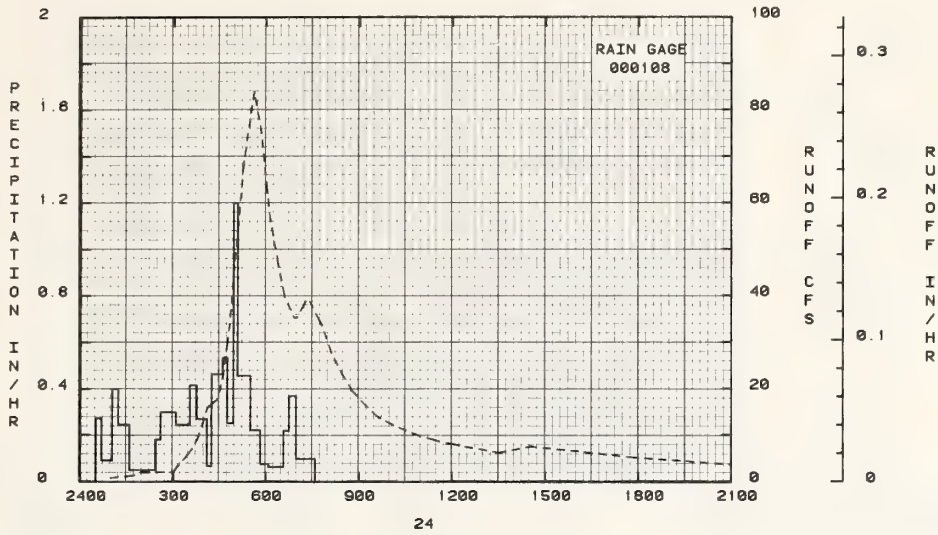
NOTES: To convert runoff in CFS to IN/HR, multiply by 0.00327305.



EVENT OF JANUARY 29, 1970
COSHOCTON, OHIO WATERSHED 196

1970			COSHOCTON, OHIO WATERSHED 196							
SELECTED RUNOFF EVENT										
ANTECEDENT CONDITIONS			RAINFALL				RUNOFF			
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)
EVENT OF APRIL 24, 1970										
RG 000108			RG 000108							
4-24	0.0	0.002	4-24	30	0.0	0.0	4-24	100	0.831	0.0
				41	0.2727	0.05		145	1.400	0.0027
				101	0.0900	0.08		200	2.050	0.0041
				113	0.4000	0.16		300	2.050	0.0108
				135	0.2455	0.25		310	3.620	0.0123
WATERSHED CONDITIONS: Woods, 27%; grassland, 50%; miscellaneous, 23%; watershed in improved practice.				225	0.0480	0.29		326	5.400	0.0162
				235	0.1800	0.32		336	7.000	0.0196
				245	0.3000	0.37		346	9.050	0.0240
				305	0.3000	0.47		356	12.100	0.0298
				332	0.2444	0.58		406	16.000	0.0375
				345	0.4154	0.67		426	17.800	0.0559
				405	0.2700	0.76		436	22.400	0.0669
				414	0.0667	0.77		446	31.000	0.0815
				436	0.4636	0.94		452	37.000	0.0926
				445	0.5333	1.02		458	46.200	0.1062
				457	0.2500	1.07		506	56.000	0.1285
				505	1.2000	1.23		516	69.000	0.1626
				530	0.4560	1.42		526	76.500	0.2022
				549	0.2211	1.49		536	84.000	0.2460
				605	0.0750	1.51		550	75.000	0.3067
				634	0.0621	1.54		600	63.800	0.3446
				645	0.2182	1.58		608	56.000	0.3707
				658	0.3692	1.66		624	46.200	0.4153
				735	0.0973	1.72		636	39.700	0.4434
								654	35.300	0.4802
								700	35.300	0.4918
								716	38.800	0.5241
								724	38.800	0.5410
								748	33.600	0.5884
								806	27.700	0.6185
								826	23.400	0.6464
								846	19.600	0.6699
								916	16.000	0.6990
								940	13.600	0.7184
								1006	12.100	0.7366
								1046	10.200	0.7609
								1136	8.520	0.7864
								1200	8.000	0.7972
								1330	6.160	0.8320
								1430	7.500	0.8544
								1800	5.020	0.9261
								2200	3.620	0.9827
								2400	3.460	1.0059

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.00327305.



COSHOCTON, OHIO WATERSHED 10

LOCATION: Coshocton Co., Ohio; 10 mi. NE of Coshocton; Little Mill Creek, Walhonding River, Muskingum River Basin.

AREA: 122.00 acres

MONTHLY PRECIPITATION AND RUNOFF (inches)														COSHOCTON, OHIO		WATERSHED 10	
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual			
1970	P	2.33	1.99	3.52	5.96	4.42	3.99	3.66	0.68	3.63	4.03	2.92	2.71	38.96			
	Q	1.238	1.248	1.288	3.101	1.087	0.171	0.081	0.011	0.028	0.089	0.370	0.855	9.567			
STA AV	P	2.80	2.42	3.46	3.48	3.70	4.07	4.45	2.77	2.55	2.26	2.57	2.40	36.94			
	Q	1.161	1.326	1.842	1.557	0.916	0.662	0.500	0.177	0.118	0.142	0.239	0.625	9.266			
ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																	
		Maximum Discharge		1 Hour		2 Hours		Maximum Volume for Selected Time Interval		12 Hours		1 Day		2 Days		8 Days	
		Date	Rate	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.
1970		1-29	0.266	1-29	0.237	1-29	0.374	1-29	0.552	4-24	0.660	4- 1	0.809	4- 1	0.957	1-28	1.493
MAXIMUMS FOR PERIOD OF RECORD																	
		6-28	1.760	6-28	0.980	6-28	1.390	7- 5	1.817	7- 5	2.104	7- 5	2.370	7- 5	2.588	7- 5	3.461
		1957		1957		1957		1969		1969		1969		1969		1969	

NOTES: Watershed conditions: Cover of 21% idle cropland; 48% grassland; 25% woodland; 6% miscellaneous; watershed in improved practice. For map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1956-59, USDA Misc. Pub. 945, p. 26.31-4. For Geology description and map, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1962, USDA Misc. Pub. 1070, pp. 26.31-1 and 26.37-2. Precipitation data from rain gage 27 and 91. Precipitation and runoff records began Jan. 1939. For long-time precipitation records, see National Weather Service Records at Coshocton, Ohio.

1970		DAILY PRECIPITATION (inches)					COSHOCTON, OHIO WATERSHED 10							
	Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
	1	0.14S	0.0	0.0	0.88	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	2	0.14S	0.88	0.13	1.19	0.45	0.0	0.0	0.0	0.0	0.15	1.03	0.0	
	3	0.17S	0.14S	0.27	0.0	0.0	0.38	0.0	0.0	0.84	0.0	0.0	0.32	
	4	0.12S	0.0	0.75	0.0	0.09	0.0	0.0	0.0	0.10	0.0	0.0	0.0	
	5	0.05S	0.0	0.0	0.0	0.04	0.45	0.0	0.0	0.0	0.0	0.0	0.0	
	6	0.06S	0.0	0.0	0.18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	7	0.10S	0.15S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	8	0.0	0.17	0.0	0.0	0.0	0.0	1.52	0.0	0.02E	0.0	0.0	0.0	
	9	0.0	0.27	0.01S	0.0	0.0	0.0	0.12	0.18	0.0	0.0	0.0	0.0	
	10	0.0	0.0	0.0	0.0	0.0	0.0	0.07	0.0	0.0	0.30	0.14	0.0	
	11	0.13S	0.0	0.0	0.0	0.25	0.0	0.0	0.0	0.0	1.22	0.0	0.45	
	12	0.0	0.04S	0.42S	0.0	0.69	0.52	0.0	0.0	0.0	0.26	0.09	0.63	
	13	0.0	0.03S	0.24S	0.75	1.50	0.0	0.0	0.0	0.0	0.29	0.0	0.10	
	14	0.0	0.0	0.11S	0.06	0.0	0.0	0.0	0.0	0.0	0.32	0.66	0.0	
	15	0.0	0.30M	0.03S	0.0	0.0	0.0	0.42	0.0	0.0	0.0	0.17	0.0	
	16	0.0	0.0	0.05S	0.0	0.36	0.13	0.0	0.02	0.0	0.0	0.0	0.28	
	17	0.07E	0.0	0.21S	0.0	0.0	0.92	0.0	0.0	0.0	0.0	0.0	0.07	
	18	0.07S	0.0	0.39S	0.0	0.0	0.0	0.0	0.0	0.07E	0.0	0.0	0.0	
	19	0.0	0.0	0.15	0.33	0.0	0.0	0.05	0.11	0.0	0.0	0.0	0.0	
	20	0.03S	0.0	0.09	0.51	0.0	0.0	0.28	0.0	0.02E	0.08	0.21	0.0	
	21	0.0	0.0	0.0	0.0	0.0	0.31	0.0	0.0	0.0	0.48	0.0	0.17S	
	22	0.0	0.0	0.41S	0.0	0.0	0.0	0.0	0.22	0.0	0.0	0.0	0.52	
	23	0.0	0.0	0.0	0.11	0.0	0.0	0.09	0.0	0.0	0.0	0.0	0.07S	
	24	0.0	0.0	0.0	1.94	0.64	0.0	0.0	0.0	0.16	0.0	0.0	0.0	
	25	0.06E	0.0	0.24	0.0	0.40	0.31E	0.0	0.0	1.35	0.0	0.02S	0.04S	
	26	0.07M	0.0	0.15	0.0	0.0	0.28	0.0	0.0	0.78	0.0	0.0	0.0	
	27	0.06S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.28	0.0	0.10S	0.05S	
	28	0.06S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.10	0.0	
	29	1.01	0.18S	0.0	0.0	0.0	0.08	0.27	0.0	0.0	0.42	0.38	0.0	
	30	0.0	0.0	0.0	0.0	0.0	0.0	0.83	0.0	0.0	0.50	0.0	0.0	
	31	0.0		0.0		0.0		0.0	0.13		0.0		0.0	
	TOTAL	2.33	1.99	3.52	5.96	4.42	3.09	3.66	0.68	3.63	4.03	2.92	2.71	
	STA AV	2.80	2.42	3.46	3.48	3.70	4.07	4.45	2.77	2.55	2.26	2.57	2.40	

NOTES: For daily air temperatures in the vicinity, see table for Watershed W-95, p. 26.035-1. Precipitation amounts are for rain gage 27 and 91. STA AV based on 32 yr period.

1970 MEAN DAILY DISCHARGE (cfs) COSHOCTON, OHIO WATERSHED 10												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.078	0.224	0.052	0.292E	0.132	0.032	0.010	0.006	0.0	0.001	0.022	0.078
2	0.078	1.491	0.060	4.088E	0.212	0.032	0.010	0.004	0.0	0.001	0.187	0.364
3	0.074	0.621	0.202	0.717	0.163	0.041	0.009	0.004	0.005	0.001	0.183	0.077
4	0.367	0.318E	0.895	0.394	0.132	0.036	0.008	0.004	0.003	0.001	0.076	0.083
5	0.061	0.216	0.533	0.315	0.114	0.081	0.008	0.004	0.001	0.004	0.050	0.064
6	0.055	0.186	0.313	0.281	0.094	0.039	0.007	0.003	0.001	0.003	0.039	0.058
7	0.052	0.181	0.237	0.253	0.071	0.034	0.006	0.002	0.0 T	0.001	0.034	0.055
8	0.049	0.244	0.198	0.182	0.061	0.030	0.069	0.002	0.0	0.001	0.030	0.052
9	0.047	0.663	0.163	0.158	0.055	0.028	0.038	0.004	0.0 T	0.001	0.028	0.049
10	0.044	0.382	0.137	0.132	0.049	0.026	0.028	0.003	0.001	0.006	0.028	0.047
11	0.042	0.275	0.129	0.118	0.059	0.022	0.018	0.002	0.001	0.007	0.028	0.068
12	0.039	0.204	0.105	0.118	0.156	0.029	0.011	0.002	0.001	0.020	0.032	0.567
13	0.036	0.154	0.093	0.327	1.881E	0.022	0.010	0.002	0.001	0.045	0.030	0.317
14	0.036	0.123	0.082	0.335	0.481	0.020	0.009	0.002	0.001	0.034	0.069	0.200
15	0.036	0.109	0.078	0.211	0.281	0.020	0.016	0.001	0.001	0.027	0.185	0.150
16	0.036	0.097	0.071	0.186	0.289	0.022	0.012	0.001	0.001	0.013	0.093	0.184
17	0.036	0.109	0.076	0.158	0.212	0.080	0.006	0.001	0.001	0.009	0.066	0.172
18	0.039	0.141	0.139	0.137	0.153	0.040	0.006	0.001	0.001	0.007	0.058	0.142
19	0.042	0.111	0.205	0.183	0.127	0.026	0.006	0.001	0.001	0.007	0.058	0.119
20	0.042	0.075	0.272	0.613	0.102	0.024	0.014	0.001	0.001	0.007	0.070	0.097
21	0.042	0.064	0.274	0.254	0.078	0.030	0.009	0.001	0.001	0.024	0.058	0.093
22	0.042	0.064	0.273	0.186	0.064	0.026	0.006	0.001	0.001	0.016	0.052	0.462
23	0.042	0.061	0.210	0.170	0.055	0.022	0.007	0.001	0.001	0.011	0.044	0.286
24	0.042	0.058	0.185	4.040	0.086	0.017	0.006	0.001	0.001	0.009	0.042	0.193
25	0.066	0.062	0.227	0.752	0.156	0.014	0.006	0.001	0.006	0.007	0.039	0.147
26	0.104	0.058	0.360	0.431	0.097	0.020	0.005	0.001	0.026	0.005	0.036	0.127
27	0.064	0.055	0.299	0.300	0.052	0.020	0.004	0.001	0.032	0.004	0.036	0.109
28	0.191	0.052	0.257	0.229	0.044	0.016	0.004	0.001	0.007	0.004	0.036	0.093
29	3.920E		0.187	0.180	0.039	0.014	0.007	0.0 T	0.003	0.013	0.085	0.082
30	0.534		0.152	0.152	0.036	0.011	0.048	0.0	0.001	0.053	0.099	0.074
31	0.309		0.142		0.034		0.011	0.0		0.032		0.067
MEAN	0.2047	0.2285	0.2130	0.5299	0.1797	0.0292	0.0134	0.0019	0.0047	0.0147	0.0632	0.1413
INCHES	1.238	1.248	1.288	3.101	1.087	0.171	0.081	0.011	0.028	0.089	0.370	0.855
STA AV	1.161	1.326	1.842	1.557	0.916	0.662	0.500	0.177	0.118	0.142	0.239	0.625

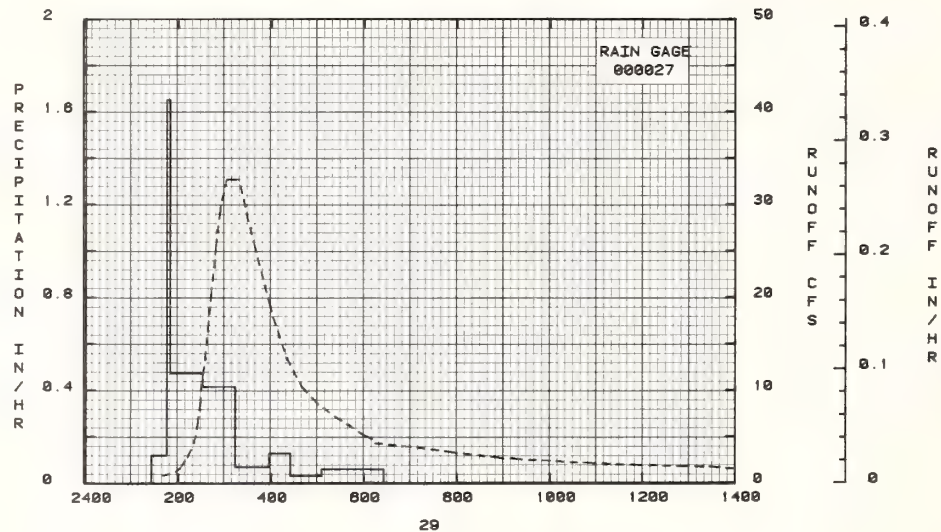
NOTES: To convert CFS to IN/DAY, multiply 0.19510. STA AV based on 32 yr period.

1970 SELECTED RUNOFF EVENT COSHOCTON, OHIO WATERSHED 10												
ANTECEDENT CONDITIONS			RAINFALL				RUNOFF					
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.		
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)		
EVENT OF JANUARY 29, 1970												
EG 000027												
1-29	0.0	0.011	1-29	125	0.0	0.0	1-29	140	0.859	0.0		
				145	0.1199	0.04		148	1.010	0.0010		
				149	1.6504	0.15		156	1.270	0.0022		
				231	0.4715	0.48		202	1.660	0.0034		
				313	0.4143	0.77		204	1.920	0.0039		
WATERSHED CONDITIONS:												
Cover of 21%, idle cropland;												
48%, grassland; 25%;												
woodland and 6%, miscel-												
laneous; watershed in												
improved practice.												
				357	0.0682	0.82		208	2.420	0.0051		
				425	0.1286	0.88		212	2.860	0.0065		
				505	0.0300	0.90		216	3.620	0.0083		
				625	0.0600	0.98		220	4.410	0.0105		
								222	5.120	0.0118		
								226	7.150	0.0151		
								228	8.470	0.0172		
								230	10.300	0.0198		
								234	13.400	0.0262		
								238	16.700	0.0344		
								242	20.300	0.0444		
								248	25.500	0.0630		
								254	29.800	0.0855		
								302	32.700	0.1194		
								318	32.700	0.1903		
								330	28.200	0.2399		
								340	24.900	0.2758		
								400	18.500	0.3346		
								420	13.400	0.3778		
								440	10.300	0.4099		
								500	8.470	0.4353		
								530	6.700	0.4661		
								600	5.120	0.4901		
								610	4.750	0.4968		
								614	4.260	0.4992		
								700	3.900	0.5246		
								800	3.230	0.5536		
								900	2.630	0.5774		
								924	2.520	0.5858		
								1100	2.060	0.6156		

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.008129.

1970 SELECTED RUNOFF EVENT			COSHOCTON, OHIO WATERSHED 10							
ANTECEDENT CONDITIONS			RAINFALL				RUNOFF			
Date Mo-Day	Rainfall (inches)	Runoff (inches)	Date Mo-Day	Time of Day	Intensity (in/hr)	Acc. (inches)	Date Mo-Day	Time of Day	Rate (cfs)	Acc. (inches)
EVENT OF JANUARY 29, 1970 (CONTINUED)										
							1-29	1200	1.880	0.6316
								1300	1.740	0.6463
								1340	1.660	0.6555
								1500	1.460	0.6724
								1700	1.270	0.6946
								1940	1.070	0.7200
								2200	0.946	0.7391
								2400	0.831	0.7535

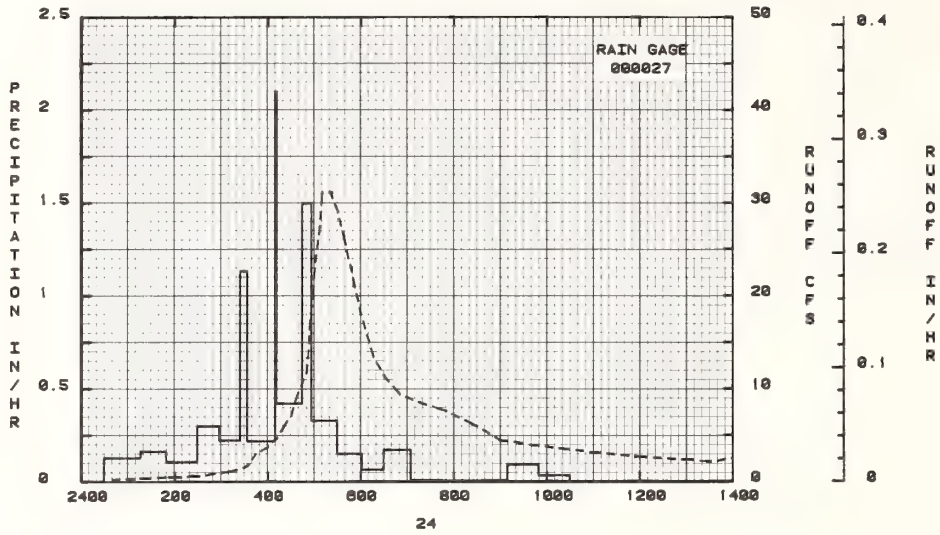
NOTES: To convert runoff in CFS to IN/HR, multiply by 0.008129.



EVENT OF JANUARY 29, 1970
COSHOCTON, OHIO WATERSHED 10

1970 SELECTED RUNOFF EVENT			COSHOCTON, OHIO			WATERSHED 10		
ANTECEDENT CONDITIONS			RAINFALL			RUNOFF		
Date Mo-Day	Rainfall (inches)	Runoff (inches)	Date Mo-Day	Time of Day	Intensity (in/hr)	Acc. (inches)	Date Mo-Day	Time of Day
								Rate (cfs)
								Acc. (inches)
EVENT OF APRIL 24, 1970								
BG 000027			RG 000027					
4-24	0.0	0.001	4-24	29	0.0	0.0	4-24	40
				116	0.1277	0.10		120
				149	0.1636	0.19		148
				229	0.1050	0.26		152
				257	0.3000	0.40		208
WATERSHED CONDITIONS: Cover of 21%, idle cropland; 48%, grassland; 25%, woodland and 6%, miscel- laneous; watershed in improved practice.				324	0.2222	0.50		0.603
				333	1.1333	0.67		0.603
				409	0.2167	0.80		0.725
				411	2.1000	0.87		0.916
				444	0.4182	1.10		1.070
				456	1.5000	1.40		1.270
				529	0.3273	1.58		1.660
				601	0.1500	1.66		1.920
				629	0.0643	1.69		2.420
				704	0.1714	1.79		2.980
				909	0.0048	1.80		3.760
				949	0.0900	1.86		4.410
				1029	0.0300	1.88		4.750
								5.900
								7.150
								8.900
								11.800
								13.400
								16.700
								20.300
								22.900
								26.830
								31.200
								31.200
								29.000
								25.500
								21.600
								17.900
								13.400
								11.300
								9.400
								8.470
								7.580
								5.900
								4.400
								4.190
								3.900
								3.490
								3.100
								2.630
								2.310
								2.110
								2.520
								2.520
								2.310
								2.110
								1.920
								1.740
								1.660
								1.500
								1.420
								1.270
								1.140

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.008129.



EVENT OF APRIL 24, 1970
COSHOCTON, OHIO WATERSHED 10

COSHOCTON, OHIO WATERSHED 5

LOCATION: Coshocton Co., Ohio; 10 mi. NE of Coshocton; Little Mill Creek, Walhonding River, Muskingum River Basin.

AREA: 349.00 acres

MONTHLY PRECIPITATION AND RUNOFF (inches)										COSHOCTON, OHIO WATERSHED 5					
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual	
1970	P	2.32	2.03	3.50	5.87	4.64	2.94	3.77	0.72	3.70	4.17	2.92	2.74	39.32	
	Q	1.408	1.485	1.557	3.339	1.298	0.459	0.324	0.026	0.248	0.328	0.721	1.445	12.637	
STA AV	P	2.79	2.37	3.45	3.46	3.78	3.99	4.50	2.82	2.63	2.22	2.66	2.44	37.10	
	Q	1.379	1.445	2.169	1.793	1.148	0.761	0.585	0.196	0.120	0.180	0.332	0.742	10.851	
ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS															
		Maximum Discharge		1 Hour		2 Hours		Maximum Volume for Selected Time Interval		1 Day		2 Days		8 Days	
		Date	Rate	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.
1970		4-24	0.173	4-24	0.151	4-24	0.238	4-24	0.440	4-24	0.559	1-28	0.727	1-28	0.960
MAXIMUMS FOR PERIOD OF RECORD															
		6-28	1.090	6-28	0.770	6-28	1.040	7- 5	1.700	7- 5	2.088	7- 5	2.495	7- 5	4.146
		1957		1957		1957		1969		1969		1969		1969	

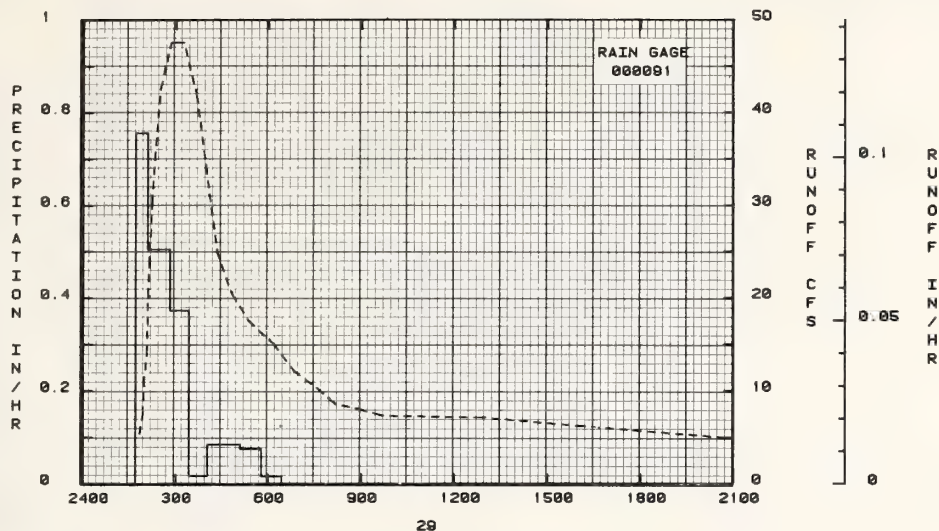
NOTES: Watershed conditions: Cover of 20% cropland, 54% grassland, 23% woodland, 3% miscellaneous; watershed in improved practice. For map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1962, USDA Misc. Pub. 1070, p. 26.32-5 (Revised). For Geology description and map, see foregoing reference, pp. 26.32-1 and 26.37-2. Precipitation data from rain gage 91. Precipitation and runoff records began Jan. 1940. For long-time precipitation records, see National Weather Service records at Coshocton, Ohio.

1970 DAILY PRECIPITATION (inches)													COSHOCTON, OHIO WATERSHED 5	
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
1	0.14S	0.0	0.0	0.90	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
2	0.14S	0.91	0.14	1.12	0.46	0.0	0.0	0.0	0.0	0.17	1.05	0.0		
3	0.19S	0.14S	0.26	0.0	0.0	0.29	0.0	0.0	1.13	0.0	0.0	0.34		
4	0.05S	0.0	0.74	0.0	0.12	0.0	0.0	0.0	0.10	0.0	0.0	0.0		
5	0.05S	0.0	0.0	0.0	0.04	0.45	0.0	0.0	0.0	0.0	0.0	0.0		
6	0.06S	0.0	0.0	0.18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
7	0.10S	0.15S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
8	0.0	0.20	0.0	0.0	0.0	0.0	1.55	0.0	0.0	0.0	0.0	0.0		
9	0.0	0.26	0.01S	0.0	0.0	0.0	0.11	0.18	0.0	0.0	0.0	0.0		
10	0.0	0.0	0.0	0.0	0.0	0.0	0.14	0.0	0.0	0.30	0.15	0.0		
11	0.13S	0.0	0.0	0.0	0.38	0.0	0.0	0.0	0.0	1.20	0.0	0.45		
12	0.0	0.04S	0.42S	0.0	0.74	0.56	0.0	0.0	0.0	0.26	0.07	0.65		
13	0.0	0.03S	0.24S	0.75	1.47	0.0	0.0	0.0	0.0	0.34	0.0	0.10		
14	0.0	0.0	0.11S	0.06	0.0	0.0	0.0	0.0	0.0	0.39	0.70	0.0		
15	0.0	0.30S	0.03S	0.0	0.0	0.0	0.45	0.0	0.0	0.0	0.18	0.0		
16	0.0	0.0	0.05S	0.0	0.36	0.21	0.0	0.0	0.0	0.0	0.0	0.30		
17	0.07E	0.0	0.21S	0.0	0.0	0.80	0.0	0.0	0.0	0.0	0.0	0.06		
18	0.07S	0.0	0.09S	0.0	0.0	0.0	0.0	0.0	0.05E	0.0	0.0	0.0		
19	0.0	0.0	0.15	0.34	0.0	0.0	0.05	0.12	0.0	0.0	0.0	0.0		
20	0.03S	0.0	0.10	0.51	0.0	0.0	0.30	0.0	0.03E	0.09	0.22	0.0		
21	0.0	0.0	0.0	0.0	0.0	0.28	0.0	0.0	0.0	0.47	0.0	0.15S		
22	0.0	0.0	0.41S	0.0	0.0	0.0	0.0	0.24	0.0	0.0	0.0	0.54		
23	0.0	0.0	0.0	0.10	0.0	0.0	0.09	0.0	0.0	0.0	0.0	0.06S		
24	0.0	0.0	0.0	1.91	0.64	0.0	0.0	0.0	0.12	0.0	0.0	0.0		
25	0.06E	0.0	0.22	0.0	0.43	0.02E	0.0	0.0	1.23	0.0	0.05S	0.04S		
26	0.07S	0.0	0.14	0.0	0.0	0.25	0.0	0.0	0.74	0.0	0.0	0.0		
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.30	0.0	0.05	0.05S		
28	0.11S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.10	0.0		
29	1.05	0.18S	0.0	0.0	0.0	0.08	0.24	0.0	0.0	0.44	0.35	0.0		
30	0.0	0.0	0.0	0.0	0.0	0.0	0.84	0.0	0.0	0.51	0.0	0.0		
31	0.0	0.0	0.0	0.0	0.0	0.0	0.18	0.0	0.0	0.0	0.0	0.0		
TOTAL	2.32	2.03	3.50	5.87	4.64	2.94	3.77	0.72	3.70	4.17	2.92	2.74		
STA AV	2.79	2.37	3.45	3.46	3.78	3.99	4.50	2.82	2.63	2.22	2.66	2.44		

NOTES: For daily air temperatures in the vicinity, see table for Watershed W-95, p. 26.035-1. Precipitation amounts are for rain gage 91. STA AV based on 31 yr period.

NOTES: To convert CFS to IN/DAY, multiply by 0.06820. STA AV based on 31 yr period.

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.00284165.



EVENT OF JANUARY 29, 1970
COSHOCTON, OHIO WATERSHED 5

1970 SELECTED RUNOFF EVENT

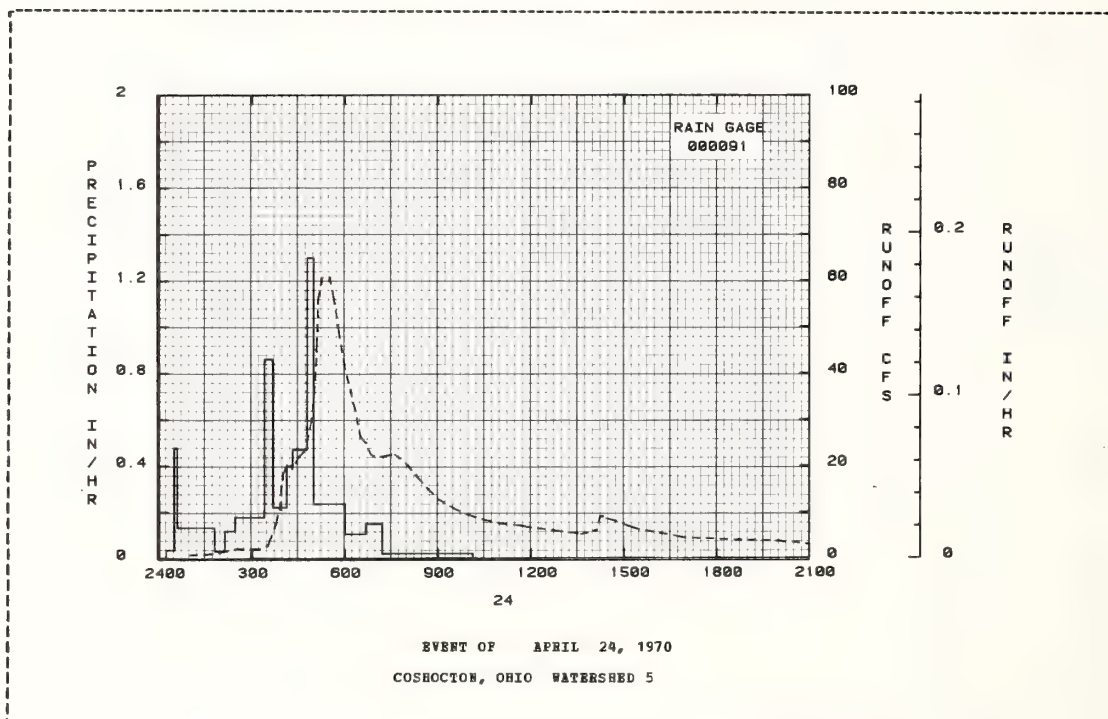
COSHOCTON, OHIO WATERSHED 5

ANTECEDENT CONDITIONS			RAINFALL				RUNOFF			
Date Mo-Day	Rainfall (inches)	Runoff (inches)	Date Mo-Day	Time of Day	Intensity (in/hr)	Acc. (inches)	Date Mo-Day	Time of Day	Rate (cfs)	Acc. (inches)
EVENT OF APRIL 24, 1970										
RG 000091			RG 000091							
4-24	0.0	0.002	4-24	14	0.0	0.0	4-24	100	0.827	0.0
				30	0.0375	0.01		130	0.975	0.0013
				35	0.4800	0.05		200	1.400	0.0030
				147	0.1333	0.21		230	2.140	0.0055
				207	0.0300	0.22		315	2.140	0.0101
WATERSHED CONDITIONS: Cover of 20%, idle cropland; 54%, grassland; 23%, wood- land; 3%, miscellaneous; watershed in improved practice.				227	0.1200	0.26		330	2.750	0.0118
				324	0.1789	0.43		338	5.030	0.0133
				340	0.8625	0.66		346	7.530	0.0157
				407	0.2222	0.76		350	9.320	0.0173
				419	0.4000	0.84		354	10.800	0.0192
				447	0.4714	1.06		356	14.200	0.0204
				459	1.3000	1.32		400	18.400	0.0235
				600	0.2361	1.56		408	20.300	0.0308
				640	0.1050	1.63		416	20.300	0.0385
				712	0.1500	1.71		418	19.400	0.0404
			1007	0.0206	1.77		430	22.000	0.0522	
							444	23.700	0.0673	
							456	30.400	0.0827	
							500	35.800	0.0890	
							504	41.800	0.0963	
							506	47.600	0.1005	
							508	56.200	0.1054	
							516	60.800	0.1276	
							530	60.800	0.1679	
							540	55.000	0.1953	
							550	47.600	0.2196	
							600	40.900	0.2406	
							620	31.900	0.2751	
							630	26.300	0.2889	
							640	25.000	0.3010	
							650	22.500	0.3123	
							656	22.000	0.3186	
							708	22.000	0.3311	
							730	22.500	0.3543	
							736	22.500	0.3607	

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.00284165.

1970 SELECTED RUNOFF EVENT			COSHOCTON, OHIO WATERSHED 5						
ANTECEDENT CONDITIONS			RAINFALL			RUNOFF			
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)
EVENT OF APRIL 24, 1970 (CONTINUED)									
							4-24	800	20.300
								820	17.500
								840	15.000
								900	12.800
								930	10.800
								1000	9.320
								1030	8.260
								1100	7.530
								1140	7.060
								1200	6.610
								1300	5.750
								1330	5.390
								1336	5.210
								1350	5.570
								1400	5.960
								1408	6.180
								1414	9.060
								1420	9.060
								1426	8.530
								1446	8.000
								1506	7.060
								1530	6.180
								1610	5.390
								1700	4.370
								2000	3.630
								2400	2.990

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.00284165.



COSHOCTON, OHIO WATERSHED 92

LOCATION: Coshocton Co., Ohio; 10 mi. NE of Coshocton; Little Mill Creek, Walhonding River, Muskingum River Basin.

AREA: 920.00 acres 1.44 sq. miles

MONTHLY PRECIPITATION AND RUNOFF (inches)														COSHOCTON, OHIO		WATERSHED 92	
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual			
1970	P	2.32	2.03	3.50	5.87	4.64	2.94	3.77	0.72	3.70	4.17	2.92	2.74	39.32			
	Q	1.453	1.841	1.757	3.987	1.570	0.356	0.183	0.007	0.143	0.270	0.717	1.359	13.643			
STA AV	P	2.78	2.42	3.46	3.47	3.70	4.04	4.53	2.79	2.57	2.28	2.59	2.41	37.03			
	Q	1.493	1.666	2.381	1.981	1.211	0.816	0.610	0.183	0.117	0.186	0.380	0.843	11.865			
ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																	
		Maximum Discharge Date Rate		1 Hour Date Vol.		2 Hours Date Vol.		Maximum Volume for Selected Time Interval 6 Hours Date Vol.		12 Hours Date Vol.		1 Day Date Vol.		2 Days Date Vol.		8 Days Date Vol.	
1970		4-24	0.263	4-24	0.216	4-24	0.336	4-24	0.585	4-24	0.732	4- 1	0.915	4- 1	1.106	1-28	1.873
MAXIMUMS FOR PERIOD OF RECORD																	
		7- 5 1969	0.780	7- 5 1969	0.625	7- 5 1969	1.101	7- 5 1969	2.417	7- 5 1969	2.908	7- 5 1969	3.377	7- 5 1969	3.730	7- 5 1969	5.164

NOTES: Watershed conditions: Cover of 16% idle cropland; 59% grassland; 21% woodland; 4% miscellaneous; watershed in improved practice. For map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1962, USDA Misc. Pub. 1070, p. 26.32-5 (Revised). For geology description and map, see foregoing reference, pp. 26.33-1 and 26.37-2. Precipitation data from rain gage 91. Precipitation and runoff records began Jan. 1939. For long-time precipitation records, see National Weather Service records at Coshocton, Ohio.

1970 DAILY PRECIPITATION (inches)														COSHOCTON, OHIO WATERSHED 92	
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec			
1	0.14S	0.0	0.0	0.90	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
2	0.14S	0.91	0.14	1.12	0.46	0.0	0.0	0.0	0.0	0.17	1.05	0.0	0.0		
3	0.19S	0.14S	0.26	0.0	0.0	0.29	0.0	0.0	1.13	0.0	0.0	0.34	0.0		
4	0.05S	0.0	0.74	0.0	0.12	0.0	0.0	0.0	0.10	0.0	0.0	0.0	0.0		
5	0.05S	0.0	0.0	0.0	0.04	0.45	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
6	0.06S	0.0	0.0	0.18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
7	0.10S	0.15S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
8	0.0	0.20	0.0	0.0	0.0	0.0	1.55	0.0	0.0	0.0	0.0	0.0	0.0		
9	0.0	0.26	0.01S	0.0	0.0	0.0	0.11	0.18	0.0	0.0	0.0	0.0	0.0		
10	0.0	0.0	0.0	0.0	0.0	0.0	0.14	0.0	0.0	0.30	0.15	0.0	0.0		
11	0.13S	0.0	0.0	0.0	0.38	0.0	0.0	0.0	0.0	1.20	0.0	0.45	0.0		
12	0.0	0.04S	0.42S	0.0	0.74	0.56	0.0	0.0	0.0	0.26	0.07	0.65	0.0		
13	0.0	0.03S	0.24S	0.75	1.47	0.0	0.0	0.0	0.0	0.34	0.0	0.10	0.0		
14	0.0	0.0	0.11S	0.06	0.0	0.0	0.0	0.0	0.0	0.39	0.70	0.0	0.0		
15	0.0	0.30M	0.03S	0.0	0.0	0.0	0.45	0.0	0.0	0.0	0.18	0.0	0.0		
16	0.0	0.0	0.05S	0.0	0.36	0.21	0.0	0.0	0.0	0.0	0.0	0.30	0.0		
17	0.07E	0.0	0.21S	0.0	0.0	0.80	0.0	0.0	0.0	0.0	0.0	0.06	0.0		
18	0.07S	0.0	0.09S	0.0	0.0	0.0	0.0	0.0	0.05E	0.0	0.0	0.0	0.0		
19	0.0	0.0	0.15	0.34	0.0	0.0	0.05	0.12	0.0	0.0	0.0	0.0	0.0		
20	0.03S	0.0	0.10	0.51	0.0	0.0	0.30	0.0	0.03E	0.09	0.22	0.0	0.0		
21	0.0	0.0	0.0	0.0	0.0	0.28	0.0	0.0	0.0	0.47	0.0	0.15S	0.0		
22	0.0	0.0	0.41S	0.0	0.0	0.0	0.0	0.24	0.0	0.0	0.0	0.54	0.0		
23	0.0	0.0	0.0	0.10	0.0	0.0	0.09	0.0	0.0	0.0	0.0	0.06S	0.0		
24	0.0	0.0	0.0	1.91	0.64	0.0	0.0	0.0	0.12	0.0	0.0	0.0	0.0		
25	0.06E	0.0	0.22	0.0	0.43	0.02E	0.0	0.0	1.23	0.0	0.05S	0.04S	0.0		
26	0.07S	0.0	0.14	0.0	0.0	0.25	0.0	0.0	0.74	0.0	0.0	0.0	0.0		
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.30	0.0	0.05	0.05S	0.0		
28	0.11S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.10	0.0	0.0		
29	1.05		0.18S	0.0	0.0	0.08	0.24	0.0	0.0	0.44	0.35	0.0	0.0		
30	0.0		0.0	0.0	0.0	0.0	0.84	0.0	0.0	0.51	0.0	0.0	0.0		
31	0.0		0.0		0.0	0.0	0.0	0.18	0.0	0.0		0.0	0.0		
TOTAL	2.32	2.03	3.50	5.87	4.64	2.94	3.77	0.72	3.70	4.17	2.92	2.74			
STA AV	2.78	2.42	3.46	3.47	3.70	4.04	4.53	2.79	2.57	2.28	2.59	2.41			

NOTES: For daily air temperatures in the vicinity, see table for Watershed W-95, p. 26.035-1. Precipitation amounts are for rain gage 91. STA AV based on 32 yr period.

1970 MEAN DAILY DISCHARGE (cfs) COSHOCTON, OHIO WATERSHED 92												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.739	3.079	0.531	2.683	1.705	0.394	0.093	0.054	0.001E	0.026	0.358	0.907
2	0.739	15.403	0.598	34.927	1.583	0.352	0.086	0.035E	0.0 E	0.053	3.607	0.836
3	0.720	6.387	1.561	7.265	1.542	0.523	0.083	0.034E	1.664E	0.052	3.094E	1.393
4	0.666	3.858	7.902	4.965	1.367	0.419	0.218	0.034E	0.359E	0.018	1.149	1.344
5	0.615	2.827	4.718	3.845	1.345	1.505	0.082	0.024E	0.042	0.017E	0.906	1.100
6	0.572	2.430	3.170	3.500	1.077	0.412	0.069	0.013E	0.021	0.017	0.739	1.003
7	0.502	2.280	2.635	3.009	0.907	0.311	0.052	0.011E	0.018	0.018	0.590	0.881
8	0.450	2.523	2.330	2.425	0.818	0.261	2.634	0.009E	0.014	0.020	0.488	0.776
9	0.427	6.507	2.190	1.972	0.721	0.224	0.745	0.010E	0.016	0.020	0.407	0.739
10	0.394	3.927	1.785	1.705	0.648	0.206	0.417	0.011E	0.008	0.125	0.444E	0.651
11	0.362	2.885	1.405	1.560	0.651	0.189	0.238	0.009E	0.004	3.565	0.352	1.046
12	0.342	2.385	1.250E	1.460	1.997	1.658	0.140	0.006E	0.002	0.645E	0.355	6.343
13	0.322	1.945	1.225E	3.032	16.864	0.403	0.101	0.003E	0.0 T	0.759E	0.332	3.500
14	0.312	1.595	1.200E	2.975	5.301	0.261	0.075	0.001E	0.0	0.679	1.156	2.440
15	0.292	1.455	1.175E	2.219	3.351	0.249	0.143	0.001E	0.0	0.406	2.214	1.910
16	0.283	1.335E	1.125E	1.970	3.146	0.994	0.105	0.0 T	0.0	0.166	1.140	2.102
17	0.536	1.200E	1.075E	1.850	2.435E	1.656	0.052	0.0 E	0.0	0.124	0.553	2.070
18	0.754	1.100E	1.183	1.735E	1.820E	0.792	0.045	0.0	0.0	0.101	0.882	1.700
19	0.483	1.050	2.164	1.987	1.465E	0.320	0.042	0.0	0.0	0.086	0.757	1.495
20	0.363	1.050E	2.802	5.075	1.250	0.239	0.334	0.0	0.0	0.082E	1.034	1.255
21	0.322	1.002E	2.180	2.592	1.100	0.639	0.158	0.0	0.0	0.474	0.828	1.150
22	0.312E	0.930	2.469	2.167	0.906	0.287	0.051	0.0	0.0	0.267	0.666	4.455
23	0.312	0.860	2.660	1.930	0.776	0.190	0.062	0.0	0.0	0.183	0.534	2.861
24	0.302	0.776	2.485	33.510	1.249	0.153	0.036	0.0	0.0	0.153	0.405	2.160
25	0.526	0.696	2.408	7.353	2.006	0.178	0.025	0.0	1.585	0.128	0.405	1.775
26	1.424	0.572	3.342	4.865E	1.226	0.328	0.026	0.0	0.930	0.108	0.476	1.560
27	0.626	0.586	2.585	3.845E	0.803	0.231	0.034	0.0	0.713	0.093	0.543	1.310
28	2.245	0.517	2.235	3.170E	0.684	0.138	0.028	0.0	0.073	0.086	0.502	1.125
29	30.408		2.015	2.495E	0.586	0.152	0.095	0.0	0.037	0.184	1.218	1.002
30	5.832		1.850	2.020E	0.502	0.112	0.660	0.0	0.031	1.241	1.179	0.883
31	3.995		1.766		0.439		0.123	0.030E		0.554		0.794
MEAN	1.8123	2.5415	2.1913	5.1365	1.5572	0.4593	0.2276	0.0093	0.1840	0.3371	0.9239	1.6939
INCHES	1.453	1.841	1.757	3.987	1.570	0.356	0.183	0.007	0.143	0.270	0.717	1.359
STA AV	1.493	1.666	2.381	1.981	1.211	0.816	0.610	0.183	0.117	0.186	0.380	0.843

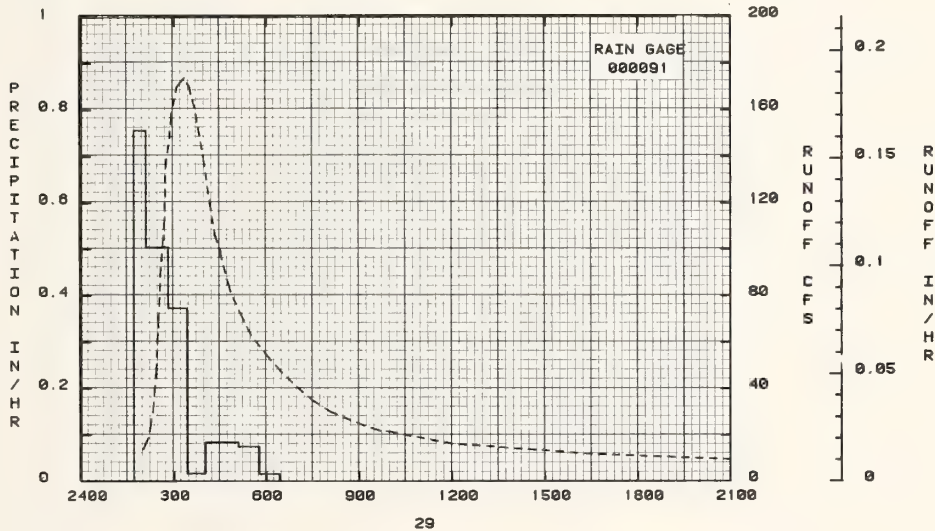
NOTES: To convert CFS to IN/DAY, multiply 0.025871. STA AV based on 32 yr period.

1970			SELECTED FLOOD EVENT				COSHOCTON, OHIO				WATERSHED 92	
ANTECEDENT CONDITIONS			RAINFALL				RUNOFF					
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.		
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)		
EVENT OF JANUARY 29, 1970												
RG 000091												
1-29	0.0	0.020	1-29	142	0.0	0.0	1-29	200	13.900	0.0		
				205	0.7566	0.29		210	18.800	0.0029		
				249	0.5045	0.66		214	23.900	0.0044		
				326	0.3731	0.89		220	31.200	0.0074		
				402	0.0167	0.90		222	38.400	0.0086		
WATERSHED CONDITIONS:												
Cover of 16%, idle cropland;												
59%, grassland; 21% wood-												
land; 4%, miscellaneous;												
watershed in improved												
practice.												
				506	0.0844	0.99		225	46.800	0.0109		
				546	0.0750	1.04		226	50.600	0.0118		
				626	0.0150	1.05		228	60.800	0.0138		
								230	65.700	0.0162		
								232	79.300	0.0189		
								234	92.100	0.0220		
								240	106.000	0.0327		
								242	114.000	0.0367		
								244	136.000	0.0412		
								250	145.000	0.0564		
								256	159.000	0.0728		
								306	170.000	0.1024		
								320	174.000	0.1457		
								330	170.000	0.1766		
								340	161.000	0.2063		
								350	149.000	0.2342		
								400	136.000	0.2598		
								410	120.000	0.2828		
								420	106.000	0.3031		
								430	98.600	0.3215		
								450	81.800	0.3539		
								510	72.000	0.3815		
								530	63.000	0.4058		
								600	54.500	0.4375		
								630	46.800	0.4648		
								650	42.600	0.4809		
								710	38.400	0.4954		
								730	34.800	0.5086		
								804	30.000	0.5284		
								830	27.500	0.5418		

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.00107757.

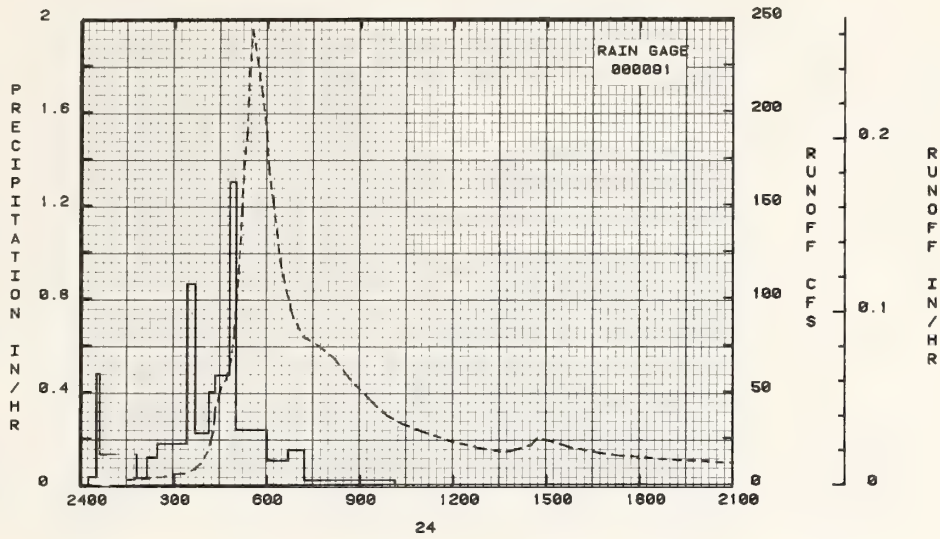
1970 SELECTED RUNOFF EVENT			COSHOCTON, OHIO WATERSHED 92								
ANTECEDENT CONDITIONS			RAINFALL				RUNOFF				
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.	
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)	
EVENT OF JANUARY 29, 1970 (CONTINUED)											
				1-29				910	23.900	0.5603	
								940	21.800	0.5726	
								1000	21.300	0.5803	
								1200	16.200	0.6207	
								1630	11.700	0.6884	
								2100	9.380	0.7395	
								2400	7.810	0.7673	

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.00107797.



1970			SELECTED RUNOFF EVENT			COSHOCTON, OHIO			WATERSHED 92		
ANTECEDENT CONDITIONS			RAINFALL			RUNOFF					
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.	
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)	
EVENT OF APRIL 24, 1970											
RG 000091			EG 000091								
4-24	0.0	0.004	4-24	14	0.0	0.0	4-24	130	3.020	0.0	
				30	0.0375	0.01		200	3.540	0.0018	
				35	0.4800	0.05		244	4.840	0.0051	
				147	0.1333	0.21		300	5.990	0.0067	
				207	0.0300	0.22		320	6.410	0.0089	
WATERSHED CONDITIONS: Cover of 16%, idle cropland; 59%, grassland; 21%, wood- land; 4%, miscellaneous; watershed in improved practice.				227	0.1200	0.26		340	8.820	0.0116	
				324	0.1789	0.43		352	11.700	0.0138	
				340	0.8625	0.66		358	14.600	0.0152	
				407	0.2222	0.76		404	17.900	0.0170	
				419	0.4000	0.84		410	22.900	0.0192	
				447	0.4714	1.06		416	28.700	0.0220	
				459	1.3000	1.32		418	35.500	0.0231	
				600	0.2361	1.56		420	41.800	0.0245	
				640	0.1050	1.63		426	46.800	0.0293	
				712	0.1500	1.71		430	52.600	0.0329	
				1007	0.0206	1.77		440	56.400	0.0427	
								450	67.400	0.0538	
								456	81.800	0.0618	
								500	98.600	0.0683	
								504	114.000	0.0759	
								508	133.000	0.0848	
								510	147.000	0.0898	
								514	170.000	0.1012	
								520	188.000	0.1205	
								522	204.000	0.1275	
								524	220.000	0.1351	
								530	244.000	0.1601	
								540	228.000	0.2025	
								550	208.000	0.2417	
								558	188.000	0.2702	
								602	170.000	0.2831	
								610	152.000	0.3062	
								618	136.000	0.3269	
								624	120.000	0.3407	
								630	112.000	0.3532	
								640	100.000	0.3722	
								650	89.500	0.3892	
								710	79.300	0.4195	
								740	74.400	0.4609	
								810	67.400	0.4991	
								840	56.400	0.5325	
								914	46.800	0.5640	
								932	41.800	0.5783	
								952	37.000	0.5925	
								1022	32.600	0.6113	
								1110	27.500	0.6372	
								1150	23.900	0.6557	
								1200	22.900	0.6599	
								1250	19.700	0.6790	
								1330	17.900	0.6925	
								1346	17.900	0.6976	
								1410	19.700	0.7057	
								1430	21.300	0.7131	
								1440	24.500	0.7172	
								1500	23.900	0.7259	
								1526	21.800	0.7366	
								1550	19.700	0.7456	
								1640	17.100	0.7621	
								1730	15.300	0.7767	
								1920	13.100	0.8048	
								2110	11.700	0.8293	
								2330	10.500	0.8572	
								2400	10.500	0.8629	

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.00107797.



EVENT OF APRIL 24, 1970
COSHOCTON, OHIO WATERSHED 92

COSHOCTON, OHIO WATERSHED 94

LOCATION: Coshocton Co., Ohio; 10 mi. NE of Coshocton; Little Mill Creek, Walhonding River, Muskingum River Basin.

AREA: 1520.00 acres 2.37 sq. miles

MONTHLY PRECIPITATION AND RUNOFF (inches)														COSHOCTON, OHIO WATERSHED 94											
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual											
1970	P	2.33	1.99	3.52	5.96	4.42	3.09	3.66	0.68	3.63	4.03	2.92	2.71	38.96											
	Q	1.612	1.884	1.808	4.323	1.734	0.402	0.213	0.031	0.119	0.258	0.733	1.330	14.447											
STA AV	P	2.78	2.43	3.46	3.47	3.69	4.04	4.50	2.79	2.56	2.27	2.53	2.40	36.97											
	Q	1.504	1.651	2.400	1.985	1.236	0.863	0.653	0.215	0.136	0.197	0.361	0.813	12.014											
ANNUAL MAXIMUM DISCHARGE (in/cf) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																									
		Maximum Discharge		1 Hour		2 Hours		Maximum Volume for Selected Time Interval		6 Hours		12 Hours		1 Day		2 Days		8 Days							
		Date	Rate	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.						
1970		4-24	0.342	4-24	0.296	4-24	0.464	4-24	0.748	4-24	0.899	4-24	1.061	4-24	1.262	1-28	1.867								
MAXIMUMS FOR PERIOD OF RECORD																									
		6-28	0.920	6-28	0.770	6-28	1.220	7- 5	2.503	7- 5	2.921	7- 5	3.409	7- 5	3.750	7- 5	5.217								
		1957		1957		1957		1969		1969		1969		1969		1969									

NOTES: Watershed conditions: Cover of 15%, cropland; 57%, grassland; 24%, woodland, 4%, miscellaneous; watershed in improved practice. For map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1956-59, USDA Misc. Pub. 945, p. 26.34-5. For Geology description and map, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1962, USDA Misc. Pub. 1070, pp. 26.34-1 and 26.37-2. Precipitation data from rain gages 27 and 91. Precipitation and runoff records began Jan. 1939. For long-time precipitation records, see National Weather Service records at Coshocton, Ohio.

1970					DAILY PRECIPITATION (inches)					COSHOCTON, OHIO					WATERSHED 94			
	Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec					
	1	0.14S	0.0	0.0	0.88	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0					
	2	0.14S	0.88	0.13	1.19	0.45	0.0	0.0	0.0	0.0	0.15	1.03	0.0					
	3	0.17S	0.14S	0.27	0.0	0.0	0.38	0.0	0.0	0.84	0.0	0.0	0.32					
	4	0.12S	0.0	0.75	0.0	0.09	0.0	0.0	0.0	0.10	0.0	0.0	0.0					
	5	0.05S	0.0	0.0	0.0	0.04	0.45	0.0	0.0	0.0	0.0	0.0	0.0					
	6	0.06S	0.0	0.0	0.18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0					
	7	0.10S	0.15S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0					
	8	0.0	0.17	0.0	0.0	0.0	0.0	1.52	0.0	0.02E	0.0	0.0	0.0					
	9	0.0	0.27	0.01S	0.0	0.0	0.0	0.12	0.18	0.0	0.0	0.0	0.0					
	10	0.0	0.0	0.0	0.0	0.0	0.0	0.07	0.0	0.0	0.30	0.14	0.0					
	11	0.13S	0.0	0.0	0.0	0.25	0.0	0.0	0.0	0.0	1.22	0.0	0.45					
	12	0.0	0.04S	0.42S	0.0	0.69	0.52	0.0	0.0	0.0	0.26	0.09	0.63					
	13	0.0	0.03S	0.24S	0.75	1.50	0.0	0.0	0.0	0.0	0.29	0.0	0.10					
	14	0.0	0.0	0.11S	0.06	0.0	0.0	0.0	0.0	0.0	0.32	0.66	0.0					
	15	0.0	0.30M	0.03S	0.0	0.0	0.0	0.42	0.0	0.0	0.0	0.17	0.0					
	16	0.0	0.0	0.05S	0.0	0.36	0.13	0.0	0.02	0.0	0.0	0.0	0.28					
	17	0.07E	0.0	0.21S	0.0	0.0	0.92	0.0	0.0	0.0	0.0	0.0	0.07					
	18	0.07S	0.0	0.09S	0.0	0.0	0.0	0.0	0.0	0.07E	0.0	0.0	0.0					
	19	0.0	0.0	0.15	0.33	0.0	0.0	0.05	0.11	0.0	0.0	0.0	0.0					
	20	0.03S	0.0	0.09	0.51	0.0	0.0	0.28	0.0	0.02E	0.08	0.21	0.0					
	21	0.0	0.0	0.0	0.0	0.0	0.31	0.0	0.0	0.0	0.48	0.0	0.17S					
	22	0.0	0.0	0.41S	0.0	0.0	0.0	0.0	0.22	0.0	0.0	0.0	0.52					
	23	0.0	0.0	0.0	0.11	0.0	0.0	0.09	0.0	0.0	0.0	0.0	0.07S					
	24	0.0	0.0	0.0	1.94	0.64	0.0	0.0	0.0	0.16	0.0	0.0	0.0					
	25	0.06E	0.0	0.24	0.0	0.40	0.31E	0.0	0.0	1.35	0.0	0.02S	0.04S					
	26	0.07M	0.0	0.15	0.0	0.0	0.28	0.0	0.0	0.78	0.0	0.0	0.0					
	27	0.06S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.28	0.0	0.10S	0.05S					
	28	0.06S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.10	0.0					
	29	1.01	0.0	0.18S	0.0	0.0	0.98	0.27	0.0	0.0	0.42	0.38	0.0					
	30	0.0	0.0	0.0	0.0	0.0	0.0	0.83	0.0	0.0	0.50	0.0	0.0					
	31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.13	0.0	0.0	0.0	0.0					
TOTAL		2.33	1.99	3.52	5.96	4.42	3.09	3.66	0.68	3.63	4.03	2.92	2.71					
STA AV		2.78	2.43	3.46	3.47	3.69	4.04	4.50	2.79	2.56	2.27	2.58	2.40					

NOTES: For daily air temperatures in the vicinity, see table for Watershed W-95, p. 26.035-1. Precipitation amounts are for rain gages 27 and 91. STA AV based on 32 yr period.

1970 MEAN DAILY DISCHARGE (cfs) COSHOCTON, OHIO WATERSHED 94												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	1.390	4.371	1.002	4.062	3.015	0.821	0.256	0.189	0.032	0.083	0.667E	1.605
2	1.360	23.419	1.085	62.756	3.904	0.742	0.241	0.135	0.026	0.127	5.594E	1.460
3	1.240	9.985	2.751	12.235	2.842	1.199	0.231	0.126	1.399	0.142	3.920	1.968
4	1.150	5.232	12.596	8.012	2.633	0.961	0.358	0.121	0.701	0.077	1.871	2.102
5	1.125	4.460	8.352	5.911	2.458	2.273	0.203	0.104	0.099	0.065	1.505	1.605
6	1.050	3.810	5.302	5.311	2.020	0.852	0.199	0.087	0.053	0.062	1.215	1.460
7	0.933	3.354	4.498	4.680	1.760	0.677	0.164	0.071	0.038	0.062	1.005	1.300
8	0.844	4.021	3.820	3.735	1.640	0.591	3.437	0.062	0.032	0.062	0.866	1.240
9	0.800	11.316	3.135	3.220	1.565	0.527	1.367	0.085	0.031	0.059	0.764	1.217
10	0.760	6.856	2.720	2.848	1.495	0.486	0.748	0.112	0.026	0.192	0.742	1.130
11	0.742	5.063E	2.405	2.505	1.453	0.448	0.506	0.071	0.020	3.478	0.742	1.662
12	0.724	4.620E	2.100	2.300	3.086	2.229	0.368	0.057	0.020	0.507E	0.739	9.842
13	0.706	4.120E	2.000	4.879	28.483E	0.801	0.297	0.049	0.022	1.263	0.675	5.229
14	0.706	3.660E	1.960E	5.349	9.670E	0.576	0.265	0.044	0.018	1.247	1.891	3.625
15	0.670	3.245E	1.920E	3.845	7.760E	0.542	0.399	0.039	0.014	0.960	4.047	2.885
16	0.627	2.885E	1.880E	3.380	7.725E	1.582	0.356	0.042	0.014	0.471	2.112	3.329
17	1.070	2.610E	1.760	3.060	5.665E	2.745	0.210	0.040	0.015	0.341	1.675	3.445
18	1.400	2.300E	2.052	2.775	3.922E	1.459	0.181	0.034	0.018	0.269	1.528	2.885
19	1.092	2.050	3.811	3.288	2.725E	0.696	0.157	0.045	0.022	0.226	1.390	2.460
20	0.932	1.960E	5.075	8.898	2.307	0.543	0.520	0.049	0.022	0.226	1.705	2.100
21	0.866	1.840E	3.845	4.687	2.035	0.983	0.257	0.038	0.019	0.886	1.435	2.050
22	0.822	1.680E	4.542	3.800	1.724	0.614	0.157	0.051	0.016	0.640	1.160	7.487
23	0.822	1.530E	4.793	3.515	1.479	0.440	0.196	0.061	0.013	0.415	0.958	4.988
24	0.822	1.425E	4.211	66.292	2.149	0.408	0.162	0.038	0.013	0.351	0.822	3.625
25	1.135	1.220	3.980	14.265	3.282	0.408	0.135	0.032	2.202	0.303	0.822	2.940
26	2.758	1.100	5.987	9.864E	2.202	0.614	0.135E	0.029	1.163	0.267	0.933	2.565
27	1.400	1.125	4.567	7.160E	1.535	0.530	0.130E	0.026	1.143	0.242	1.025	2.150
28	4.482	1.027	3.885	5.470E	1.310	0.342	0.126E	0.026	0.195	0.192	0.958	1.880
29	56.284		3.610	4.380	1.090	0.375	0.230	0.025	0.135	0.272E	2.017	1.720
30	8.691		3.070	3.595	0.963	0.301	1.230	0.019	0.106	2.085E	2.052	1.570
31	5.632		2.775		0.903		0.360	0.054		0.912E		1.395
MEAN	3.3208	4.2959	3.7254	9.2023	3.5719	0.8562	0.4382	0.0635	0.2544	0.5318	1.5612	2.7393
INCHES	1.612	1.884	1.808	4.323	1.734	0.402	0.213	0.031	0.119	0.258	0.733	1.330
STA AV	1.504	1.651	2.400	1.985	1.236	0.863	0.653	0.215	0.136	0.197	0.361	0.813

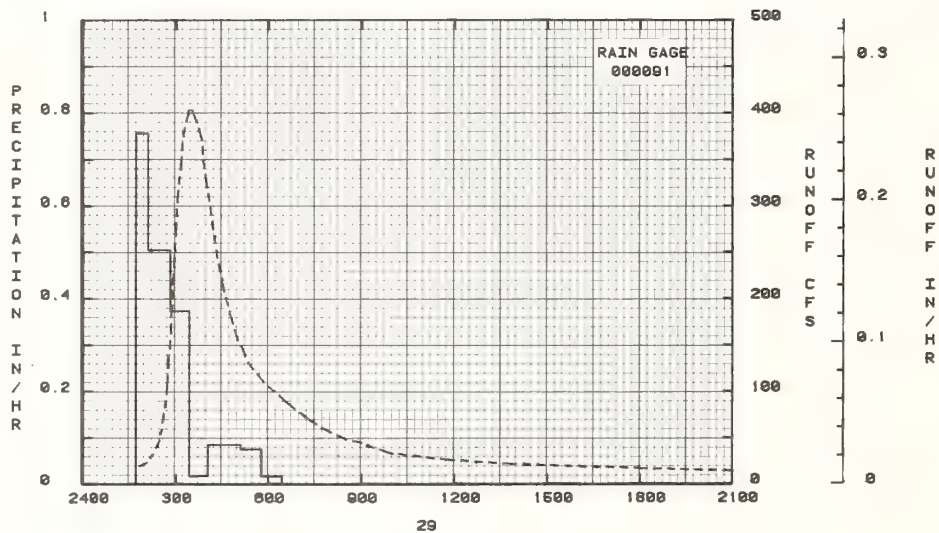
NOTES: To convert CFS to IN/DAY, multiply by 0.015690. STA AV based on 32 yr period.

1970			SELECTED RUNOFF EVENT			COSHOCTON, OHIO			WATERSHED 94		
ANTECEDENT CONDITIONS			RAINFALL			RUNOFF					
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.	
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)	
EVENT OF JANUARY 29, 1970											
	3G 000091			RG 000091							
1-29	0.0	0.022	1-29	142	0.0	0.0	1-29	150	19.800	0.0	
				205	0.7566	0.29		204	23.200	0.0033	
				249	0.5045	0.66		210	28.100	0.0050	
				326	0.3731	0.89		216	32.400	0.0070	
				402	0.0167	0.90		222	39.900	0.0094	
WATERSHED CONDITIONS:											
Cover of 15%, cropland; 57%,											
grassland; 24%, woodland; 4%,											
miscellaneous; watershed in											
improved practice.											
				506	0.0844	0.99		228	47.100	0.0122	
				546	0.0750	1.04		230	53.600	0.0133	
				626	0.0150	1.05		232	58.700	0.0145	
								234	68.100	0.0159	
								236	76.400	0.0175	
								238	83.000	0.0192	
								240	90.100	0.0211	
								242	105.000	0.0232	
								244	118.000	0.0256	
								246	139.000	0.0284	
								249	155.000	0.0332	
								250	173.000	0.0350	
								252	193.000	0.0390	
								254	219.000	0.0435	
								256	237.000	0.0484	
								258	260.000	0.0538	
								300	282.000	0.0597	
								304	317.000	0.0727	
								310	353.000	0.0945	
								314	377.000	0.1104	
								324	403.000	0.1528	
								330	403.000	0.1791	
								340	390.000	0.2222	
								350	371.000	0.2636	
								354	341.000	0.2791	
								400	320.000	0.3007	
								410	282.000	0.3334	
								420	244.000	0.3620	
								430	215.000	0.3870	
								440	193.000	0.4092	

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.0065246.

1970 SELECTED RUNOFF EVENT			COSHOCTON, OHIO WATERSHED 94							
ANTECEDENT CONDITIONS			RAINFALL			RUNOFF				
Date Mo-Day	Rainfall (inches)	Runoff (inches)	Date Mo-Day	Time of Day	Intensity (in/hr)	Acc. (inches)	Date Mo-Day	Time of Day	Rate (cfs)	Acc. (inches)
EVENT OF JANUARY 29, 1970 (CONTINUED)										
							1-29	450	173.000	0.4291
								500	155.000	0.4469
								510	145.000	0.4632
								520	131.000	0.4782
								530	124.000	0.4921
								550	110.000	0.5175
								610	99.800	0.5403
								630	90.100	0.5610
								650	80.800	0.5796
								710	72.100	0.5962
								732	64.200	0.6125
								800	55.200	0.6307
								830	47.900	0.6475
								900	44.100	0.6625
								910	41.300	0.6671
								1000	32.400	0.6871
								1200	25.100	0.7246
								1400	21.000	0.7547
								1800	16.300	0.8034
								2200	13.600	0.8424
								2400	12.300	0.8593

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.00065246.



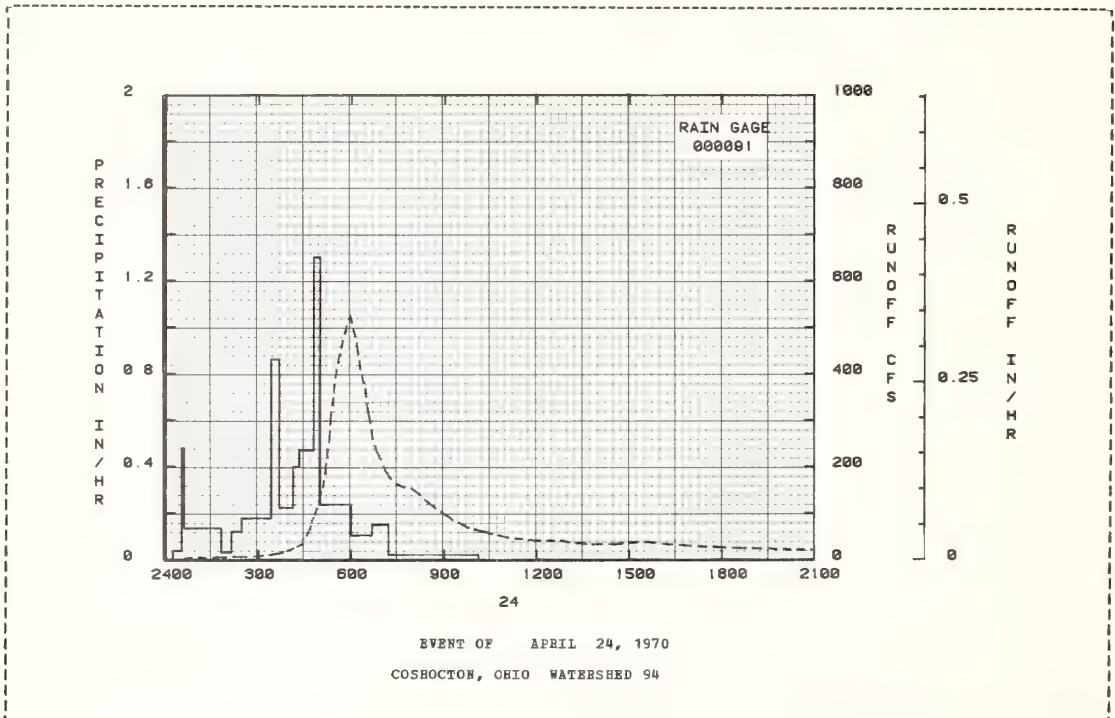
EVENT OF JANUARY 29, 1970
COSHOCTON, OHIO WATERSHED 94

1970 SELECTED RUNOFF EVENT			COSHOCTON, OHIO			WATERSHED 94		
ANTECEDENT CONDITIONS			RAINFALL			RUNOFF		
Date	Rainfall	Runoff	Date	Time	Intensity	Date	Time	Rate
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	Mo-Day	of Day	(cfs)
			Acc.			Acc.		
			(inches)			(inches)		
EVENT OF APRIL 24, 1970								
RG 000J91			EG 000G91					
4-24	0.0	0.001	4-24	14	0.0	4-24	37	3.580
				30	0.0375		137	4.700
				35	0.4800		157	5.240
				147	0.1333		237	6.500
				207	0.0300		307	8.820
WATERSHED CONDITIONS: Cover of 15%, cropland; 57% grassland; 24%, woodland; 4%, miscellaneous; watershed in improved practice.				227	0.1200		331	12.000
				324	0.1789		347	15.900
				340	0.8625		355	19.000
				407	0.2222		407	24.100
				419	0.4000		415	28.100
				447	0.4714		423	33.600
				459	1.3000		425	39.900
				600	0.2361		427	45.500
				640	0.1050		433	52.000
				712	0.1500		437	59.600
				1007	0.0206		439	64.200
							441	72.100
							443	80.800
							447	90.100
							449	97.400
							453	110.000
							457	124.000
							501	145.000
							505	155.000
							507	169.000
							509	185.000
							511	206.000
							515	237.000
							517	260.000
							519	294.000
							521	317.000
							525	347.000
							527	377.000
							531	409.000
							537	442.000
							547	488.000
							557	524.000
							607	480.000
							613	442.000
							617	409.000
							627	365.000
							631	323.000
							637	294.000
							641	260.000
							647	237.000
							657	215.000
							707	189.000
							717	173.000
							727	162.000
							743	155.000
							757	152.000
							813	139.000
							827	124.000
							843	110.000
							901	97.400
							917	85.400
							937	74.300
							947	68.100
							1097	62.300
							1033	55.200
							1105	47.100
							1207	39.900
							1249	39.900
							1303	37.300
							1319	34.800
							1337	33.600
							1347	33.000
							1407	33.000
							1427	33.600
							1447	34.800
							1507	37.300
							1517	37.900
							1533	37.900
							1551	36.000
							1611	33.600

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.00065246.

1970	SELECTED RUNOFF EVENT			COSHOCTON, OHIO WATERSHED 94						
ANTECEDENT CONDITIONS			RAINFALL			RUNOFF				
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)
EVENT OF APRIL 24, 1970 (CONTINUED)										
							4-24	1647	30.100	0.9320
								1717	28.100	0.9415
								1807	25.600	0.9561
								1847	24.100	0.9669
								1917	23.200	0.9746
								1947	22.200	0.9820
								2107	20.600	1.0006
								2237	19.000	1.0200
								2327	18.200	1.0301
								2400	17.400	1.0365

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.00065246.



COSHOCTON, OHIO WATERSHED 95

LOCATION: Coshocton Co., Ohio; 10 mi. NE of Coshocton; Little Mill Creek, Walhonding River, Muskingum River Basin.

AREA: 2570.00 acres 4.02 sq. miles

MONTHLY PRECIPITATION AND RUNOFF (inches)														COSHOCTON, OHIO WATERSHED 95																
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual																
1970	P	2.36	1.92	3.52	5.94	4.23	3.04	3.58	0.60	3.65	3.92	2.91	2.65	38.32																
	Q	1.580	1.771	1.785	4.186	1.515	0.323	0.174	0.017	0.082	0.212	0.709	1.310	13.664																
STA AV	P	2.80	2.41	3.46	3.48	3.71	4.08	4.44	2.77	2.55	2.25	2.58	2.40	36.92																
	Q	1.480	1.635	2.409	1.993	1.204	0.807	0.596	0.195	0.126	0.186	0.360	0.812	11.804																
ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																														
		Maximum Discharge		1 Hour		2 Hours		Maximum Volume for Selected Time		Interval		2 Days		8 Days																
		Date	Rate	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.															
1970		4-24	0.287	4-24	0.271	4-24	0.456	4-24	0.738	4-24	0.891	4-24	1.955	4- 1	1.234	1-28	1.828													
MAXIMUMS FOR PERIOD OF RECORD																														
		6-28	0.610	6-28	0.560	6-28	0.950	7- 5	1.873	3- 4	2.320	3- 4	2.780	3- 4	3.490	7- 5	4.292													
		1957		1957		1957		1969		1963		1963		1963		1969														

NOTES: Watershed conditions: Cover of 15%, cropland; 55%, grassland; 26%, woodland; 4%, miscellaneous; watershed in improved practice. For map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1956-59, USDA Misc. Pub. 945, p. 26.34-5. For Geology description and map, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1962, USDA Misc. Pub. 1070, pp. 26.35-1 and 26.37-2. Precipitation data from rain gages 27, 39 and 91. Precipitation and runoff records began Jan. 1939. For long-time precipitation records, see National Weather Service records at Coshocton, Ohio.

1970 DAILY AIR TEMPERATURE (degrees F)													
COSHOCTON, OHIO WATERSHED 95													
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
	max min	max min	max min	max min	max min	max min	max min	max min	max min	max min	max min	max min	max min
1	29 25	46 36	58 25	56 33	85 68	81 65	92 73	88 73	75 48	66 44	60 45	64 39	
2	28 23	46 24	50 46	54 30	68 45	79 65	90 71	82 61	80 51	73 44	54 41	60 45	
3	28 10	24 0	65 47	50 28	58 35	69 55	85 70	79 65	82 62	61 41	40 34	61 40	
4	19 13	21 -6	57 46	43 28	70 44	72 54	77 57	74 56	85 64	61 34	45 36	57 29	
5	32 15	33 21	46 28	49 24	70 37	78 59	69 52	76 57	82 62	70 39	43 38	36 24	
6	27 14	33 25	45 24	42 28	46 31	68 53	80 64	77 58	80 57	77 50	53 40	24 18	
7	14 -4	40 20	47 32	49 33	64 28	81 48	81 58	80 58	85 64	74 52	58 41	30 17	
8	-3 -8	40 33	37 25	68 34	79 49	86 62	78 60	83 62	86 63	77 58	62 40	47 20	
9	3 -7	40 33	33 21	61 44	81 59	87 62	72 61	72 64	82 65	76 59	64 46	52 38	
10	13 2	33 26	30 21	49 34	75 62	90 62	72 60	79 63	80 59	68 47	56 47	41 31	
11	20 2	31 25	40 20	48 27	78 55	86 64	78 62	82 60	72 49	64 48	53 45	52 35	
12	25 17	26 15	31 26	61 36	72 60	90 62	85 65	86 66	78 52	72 59	50 47	43 32	
13	24 7	20 13	30 22	64 41	76 56	79 62	86 66	88 64	85 56	72 62	48 44	34 30	
14	23 12	22 10	28 18	50 42	73 50	79 63	88 69	88 63	81 60	66 61	44 38	40 26	
15	30 10	30 21	24 12	63 39	83 64	80 62	87 71	88 67	89 71	61 40	39 27	34 18	
16	43 24	27 15	26 15	66 43	70 47	83 68	78 63	88 68	82 60	43 33	32 23	36 25	
17	39 35	39 16	34 18	74 48	56 45	87 66	82 60	85 66	87 56	54 32	38 23	38 30	
18	35 10	54 28	40 32	57 38	70 38	86 67	85 63	87 62	74 59	60 32	44 29	38 30	
19	20 9	51 24	42 36	52 42	80 49	70 55	82 64	89 68	78 52	63 34	47 33	53 34	
20	13 7	24 15	50 38	66 51	82 64	71 48	68 53	86 79	84 55	57 45	52 36	34 25	
21	8 -4	38 14	41 36	58 45	86 62	67 52	72 49	78 61	87 69	56 50	44 30	29 24	
22	11 -6	54 31	38 33	68 40	85 64	75 50	74 56	84 56	90 70	60 48	48 26	39 29	
23	20 10	43 29	36 33	74 60	84 64	80 54	80 60	77 60	90 69	54 37	26 11	47 24	
24	25 1	50 27	39 34	64 47	81 62	81 58	86 67	78 59	88 70	64 45	22 11	26 16	
25	41 24	43 10	46 27	70 45	82 62	74 56	87 68	82 58	76 66	63 46	28 12	28 15	
26	32 27	26 3	52 34	75 53	70 47	79 58	88 68	85 60	83 55	66 38	49 28	23 8	
27	32 29	35 26	43 30	78 55	66 43	68 57	80 69	88 65	61 49	66 45	54 48	25 20	
28	56 26	37 24	48 31	77 57	72 46	74 51	90 71	87 66	55 42	60 42	55 41	24 10	
29	56 30		32 24	80 64	82 56	80 58	89 70	88 66	58 38	54 47	56 41	27 18	
30	30 19		47 21	84 66	75 58	92 68	81 70	91 67	66 45	56 52	49 39	28 12	
31	40 21		48 31		80 61		88 73	76 56		64 52		25 19	
AV.	26 13	36 20	41 29	62 42	74 52	79 59	82 64	83 63	79 58	64 46	47 35	39 25	
MEAN	19.5	28.0	35.0	51.8	63.1	69.0	72.8	73.0	68.7	54.8	40.9	31.9	
STA AV	33 19	36 20	46 28	58 42	68 49	79 58	81 62	82 61	75 54	66 44	50 33	37 22	

NOTES: Temperature data based on records at North Appalachian Experimental Watershed. STA AV is for 32 yr (1939-70) record period.

1970 DAILY PRECIPITATION (inches)													COSHOCTON, OHIO WATERSHED 95												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec													
1	0.14S	0.0	0.0	0.87	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0													
2	0.14S	0.84	0.12	1.20	0.45	0.02	0.0	0.0	0.0	0.14	1.07	0.0													
3	0.16S	0.14S	0.28	0.0	0.0	0.40	0.0	0.0	0.76	0.0	0.0	0.30													
4	0.14S	0.0	0.74	0.0	0.08	0.0	0.0	0.0	0.11	0.0	0.0	0.0													
5	0.65S	0.0	0.0	0.0	0.04	0.44	0.0	0.0	0.0	0.0	0.0	0.0													
6	0.06S	0.0	0.0	0.18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0													
7	0.10S	0.15S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0													
8	0.0	0.16	0.0	0.0	0.0	0.0	1.51	0.0	0.03E	0.0	0.0	0.0													
9	0.0	0.26	0.01S	0.0	0.0	0.0	0.16	0.17	0.0	0.0	0.0	0.0													
10	0.0	0.0	0.0	0.0	0.0	0.0	0.05	0.0	0.0	0.30	0.13	0.0													
11	0.13S	0.0	0.0	0.0	0.19	0.0	0.0	0.0	0.0	1.24	0.0	0.44													
12	0.0	0.04S	0.42S	0.0	0.66	0.41	0.0	0.0	0.0	0.27	0.10E	0.64													
13	0.0	0.03S	0.24S	0.75	1.44	0.0	0.0	0.0	0.0	0.28	0.0	0.09													
14	0.0	0.0	0.11S	0.07	0.0	0.0	0.0	0.0	0.0	0.25	0.66	0.0													
15	0.0	0.30M	0.03S	0.0	0.0	0.0	0.0	0.42	0.0	0.0	0.16	0.0													
16	0.0	0.0	0.05S	0.0	0.35	0.09E	0.0	0.02	0.0	0.0	0.0	0.27													
17	0.07E	0.0	0.21S	0.0	0.0	0.98	0.0	0.0	0.0	0.0	0.0	0.06													
18	0.07S	0.0	0.09S	0.0	0.0	0.0	0.0	0.0	0.08E	0.6	0.0	0.0													
19	0.0	0.0	0.14	0.31	0.0	0.0	0.05E	0.10	0.0	0.0	0.0	0.0													
20	0.03S	0.0	0.09	0.50	0.0	0.0	0.28	0.0	0.01E	0.07	0.21	0.0													
21	0.0	0.0	0.0	0.0	0.0	0.31	0.0	0.0	0.01	0.48	0.0	0.18S													
22	0.0	0.0	0.41S	0.0	0.0	0.0	0.0	0.22	0.0	0.0	0.0	0.50													
23	0.0	0.0	0.0	0.11	0.0	0.0	0.10	0.0	0.0	0.0	0.01S	0.06S													
24	0.0	0.0	0.0	1.95	0.65	0.0	0.0	0.0	0.17	0.0	0.0	0.0													
25	0.06E	0.0	0.24	0.0	0.37	0.01E	0.0	0.0	1.40	0.0	0.03S	0.04S													
26	0.07M	0.0	0.15	0.0	0.01	0.29	0.0	0.0	0.79	0.0	0.0	0.0													
27	0.07S	0.0	0.0	0.0	0.0	0.0	0.0	0.28	0.0	0.09S	0.05S	0.0													
28	0.04S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.08	0.0	0.0													
29	1.02	0.18S	0.0	0.0	0.0	0.09	0.28	0.0	0.0	0.41	0.36	0.0													
30	0.0	0.0	0.0	0.0	0.0	0.0	0.74	0.0	0.0	0.47	0.0	0.0													
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.09	0.0	0.0	0.0	0.0													
TOTAL	2.36	1.92	3.52	5.94	4.23	3.04	3.58	0.60	3.65	3.92	2.91	2.65													
STA AV	2.80	2.41	3.46	3.48	3.71	4.08	4.44	2.77	2.55	2.25	2.58	2.40													

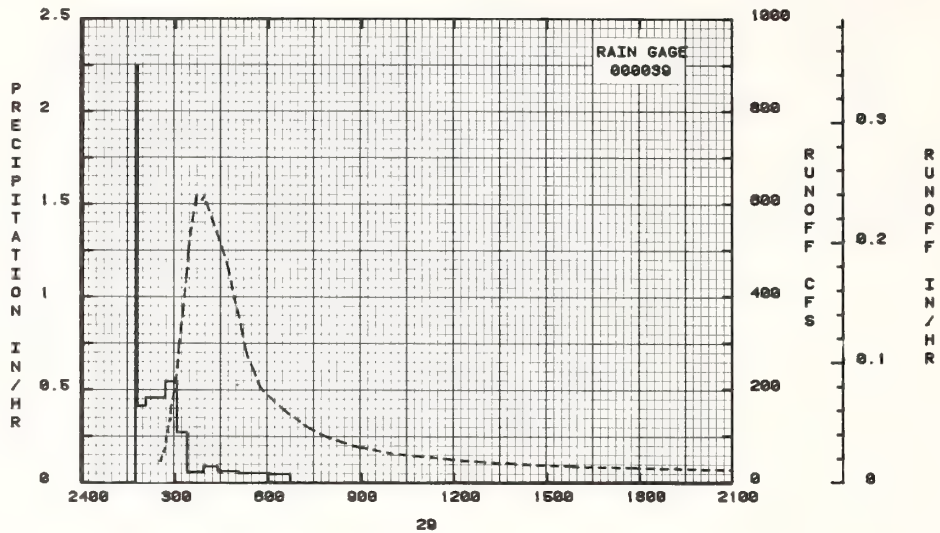
NOTES: Precipitation amounts are for rain gages 27, 39 and 91. STA AV based on 33 yr period.

1970 MEAN DAILY DISCHARGE (cfs)													COSHOCTON, OHIO WATERSHED 95												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec													
1	2.40	7.13	1.60	6.17	4.37	1.20	0.38	0.27	0.0	0.09	1.01	2.72													
2	2.35	36.46	1.73	112.36	5.91	1.40	0.35	0.17	0.0	0.11	9.21	2.35													
3	2.15	16.83	4.85	20.35	4.27	1.67	0.35	0.16	0.94	0.23	7.18	3.10													
4	1.97E	8.82	22.10	12.48	3.86	1.27	0.44	0.14	0.99	0.09	3.21	3.50													
5	1.89	6.87	15.17	9.47	3.52	3.10	0.29	0.10	0.11	0.07	2.47	2.84													
6	1.77	5.57	9.09	8.39	2.90	1.24	0.28	0.10	0.05	0.06	1.93	2.41													
7	1.41E	5.27	7.19	7.27	2.51	0.97	0.21	0.08	0.02	0.07	1.58	2.06													
8	1.15E	6.08	5.99	5.90	2.30	0.87	4.23	0.07	0.01	0.06	1.33	1.97													
9	1.15E	18.27	4.85	4.92	2.06	0.80	2.19	0.09	0.01	0.06E	1.15	1.93													
10	1.13E	11.07	4.09	4.17	1.89	0.77	1.06	0.17	0.02	0.23E	1.28	1.73													
11	1.10E	8.81E	3.59	3.86	1.85	0.72	0.72	0.07	0.01	4.75	1.07	2.52													
12	1.10E	7.79E	3.31	3.59	4.22	2.39	0.50	0.06	0.00	3.80	1.13	16.82													
13	1.10E	6.85E	3.31	7.58	44.65	1.08	0.39	0.04	0.00	2.05	1.07	9.67													
14	1.10	5.98E	3.19E	8.82	14.07	0.80	0.33	0.03	0.00	1.39	2.81	6.48													
15	1.07	5.19E	3.00E	6.53	8.73	0.78	0.59	0.03	0.0 T	1.29	7.26	5.02													
16	1.02	4.49E	2.89E	5.47	8.48	1.45	0.54	0.02	0.0	0.59	3.68	5.62													
17	1.70	3.87E	2.72E	4.83	6.64	3.49	0.30	0.02	0.0	0.43	2.84	5.92													
18	2.40	3.32E	3.14	4.17	5.06	2.27	0.26	0.02	0.0	0.34	2.39	4.74													
19	1.63	2.94E	6.35	5.04E	4.21	0.95	0.23	0.02	0.0	0.30	2.10	4.10													
20	1.33E	2.72E	8.38	15.40	3.61	0.78	0.69	0.02	0.0	0.31	2.68	3.45													
21	1.20E	2.56E	6.38	8.22	3.12	1.38	0.36	0.02	0.0	1.11	2.31	3.12													
22	1.15E	2.45E	7.60	6.13	2.73	0.87	0.24	0.02	0.0	0.91	1.85	12.18													
23	1.15E	2.35E	8.10	5.45	2.43	0.67	0.27	0.03	0.0	0.64	1.51	8.85													
24	1.15	2.25E	7.04	111.37	3.19	0.58	0.22	0.02	0.0	0.52	1.24	6.24													
25	1.66	2.15E	6.66	21.21	5.04	0.57	0.14	0.02	2.77	0.44	1.20	4.83													
26	4.63	1.85	10.32	13.20	3.45	0.84	0.17	0.01	1.42	0.40	1.40	4.03													
27	2.43	1.68	7.85	9.80	2.27	0.78	0.20	0.01	1.82	0.37	1.53	3.38													
28	6.81	1.60	6.52	7.97	1.88	0.50	0.18	0.00	0.42	0.29	1.47	2.90													
29	95.10		5.76	6.48	1.61	0.53	0.32	0.00	0.16	0.46	3.10	2.51													
30	15.01		5.28	5.39	1.43	0.44	1.87	0.00	0.11	2.87	3.65	2.30													
31	9.38		4.74		1.32		0.53	0.0 T		1.55		2.10													
MEAN	5.503	6.828	6.219	15.065	5.278	1.162	0.607	0.059	0.296	0.738	2.554	4.561													
INCHES	1.580	1.771	1.785	4.186	1.515	0.323	0.174	0.017	0.082	0.212	0.709	1.310													
STA AV	1.480	1.635	2.409	1.993	1.204	0.807	0.596	0.195	0.126	0.186	0.360	0.812													

NOTES: To convert CFS to IN/DAY, multiply by 0.0092613. STA AV based on 33 yr period.

1970			SELECTED RUNOFF EVENT			COSHOCTON, OHIO			WATERSHED 95		
ANTFCEDENT CONDITIONS			RAINFALL			RUNOFF					
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.	
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)	
EVENT OF JANUARY 29, 1970											
RG 000039			RG 000039								
1-29	0.0	0.029	1-29	142	0.0	0.0	1-29	230	46.800	0.0	
				146	2.2506	0.15		234	55.600	0.0013	
				202	0.4126	0.26		236	67.000	0.0021	
				240	0.4579	0.55		240	74.200	0.0039	
				302	0.5454	0.75		241	88.000	0.0044	
WATERSHED CONDITIONS: Cover of 15%, cropland; 55%, grassland; 26%, woodland; 4%, miscellaneous; watershed in improved practice.				322	0.2701	0.84		242	96.800	0.0050	
				354	0.0562	0.87		244	109.000	0.0063	
				422	0.0857	0.91		246	121.000	0.0078	
				502	0.0600	0.95		248	132.000	0.0094	
				602	0.0500	1.00		249	138.000	0.0103	
				642	0.0450	1.03		250	150.000	0.0112	
								252	167.000	0.0132	
								254	180.000	0.0154	
								258	200.000	0.0203	
								300	217.000	0.0230	
								303	249.000	0.0275	
								306	293.000	0.0327	
								310	329.000	0.0407	
								314	370.000	0.0497	
								318	416.000	0.0598	
				320				443.000	0.0653		
				322				462.000	0.0711		
				324				490.000	0.0772		
				326				517.000	0.0837		
				330				549.000	0.0975		
				334				582.000	0.1120		
				338				600.000	0.1272		
				340				618.000	0.1350		
				350				609.000	0.1745		
				356				618.000	0.1981		
				400				600.000	0.2138		
				410				568.000	0.2513		
				420				536.000	0.2868		
				430				503.000	0.3202		
				442				462.000	0.3574		
				450				416.000	0.3800		
				500				370.000	0.4053		
				508				329.000	0.4233		
				514				293.000	0.4353		
				520				268.000	0.4461		
				530				244.000	0.4626		
				540				213.000	0.4773		
				550				196.000	0.4905		
				600				186.000	0.5028		
				612				174.000	0.5167		
				630				156.000	0.5358		
				640				147.000	0.5455		
				652				138.000	0.5565		
				700				131.000	0.5634		
				710				123.000	0.5716		
				728				111.000	0.5851		
				740				104.000	0.5934		
				800				94.600	0.6062		
				818				88.000	0.6168		
				830				84.000	0.6234		
				846				78.000	0.6317		
				910				72.400	0.6433		
				950				63.600	0.6608		
				1000				60.300	0.6648		
				1100				55.600	0.6872		
				1200				48.200	0.7072		
				1300				42.700	0.7247		
				1400				38.900	0.7404		
				1600				33.000	0.7681		
				1800				29.800	0.7923		
				2100				25.300	0.8242		
				2400				22.100	0.8516		

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.00038589.



EVENT OF JANUARY 29, 1970
COSHOCTON, OHIO WATERSHED 95

1970 SELECTED RUNOFF EVENT

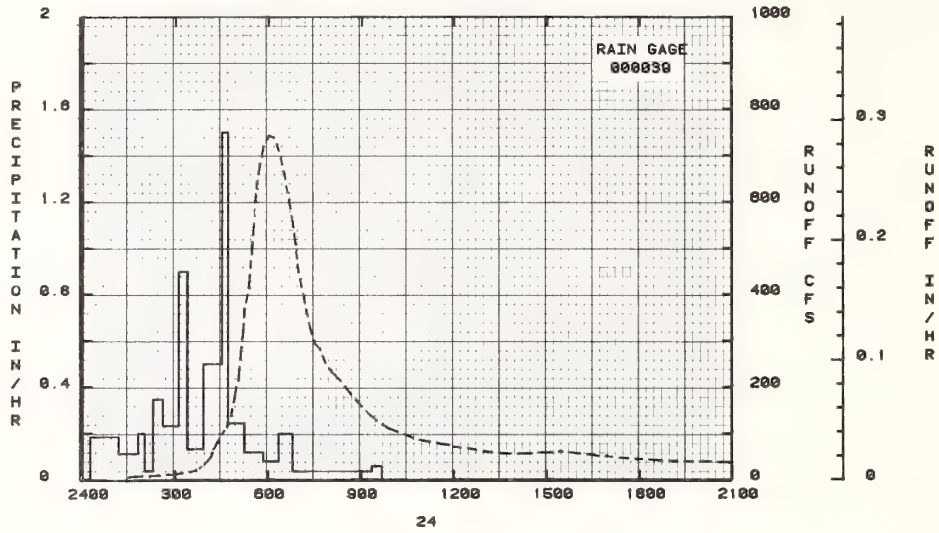
COSHOCTON, OHIO WATERSHED 95

ANTECEDENT CONDITIONS			RAINFALL				RUNOFF			
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)
EVENT OF APRIL 24, 1970										
RG 000039			RG 000039							
4-24	0.0	0.004	4-24	15	0.0	0.0	4-24	130	6.840	0.0
				110	0.1855	0.17		156	8.280	0.0013
				148	0.1105	0.24		230	9.870	0.0033
				200	0.2000	0.28		250	11.600	0.0047
				216	0.0375	0.29		314	14.900	0.0067
				235	0.3474	0.40		330	17.500	0.0084
				306	0.2323	0.52		340	21.300	0.0096
				322	0.9000	0.76		346	25.800	0.0105
				354	0.1312	0.83		350	28.700	0.0112
				430	0.5000	1.13		356	33.000	0.0124
				442	1.5000	1.43		400	38.900	0.0133
				514	0.2438	1.56		404	44.000	0.0144
				550	0.1167	1.63		408	49.600	0.0156
				620	0.0800	1.67		410	54.000	0.0163
				647	0.2000	1.76		412	58.700	0.0170
				920	0.0353	1.85		414	65.300	0.0178
				940	0.0600	1.87		418	74.200	0.0196
								420	80.000	0.0206
								424	88.000	0.0228
								430	99.000	0.0264
								434	106.000	0.0290
								440	114.000	0.0332
								442	124.000	0.0347
								446	138.000	0.0397
								450	153.000	0.0416
								454	174.000	0.0458
								458	200.000	0.0506
								502	217.000	0.0560
								504	244.000	0.0590
								506	261.000	0.0622
								508	287.000	0.0657
								510	308.000	0.0695
								512	336.000	0.0737
								514	370.000	0.0782
								522	416.000	0.0984

NOTES: To convert runoff in CFS to in/hr, multiply by 0.00038589.

1970	SELECTED RUNOFF EVENT				COSHOCTON, OHIO				WATERSHED 95			
ANTECEDENT CONDITIONS			RAINFALL			RUNOFF						
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.		
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)		
EVENT OF APRIL 24, 1970 (CONTINUED)												
							4-24	524	443.000	0.1039		
								528	499.000	0.1160		
								532	554.000	0.1295		
								534	600.000	0.1369		
								538	646.000	0.1529		
								544	683.000	0.1785		
								550	720.000	0.2056		
								600	743.000	0.2527		
								610	738.000	0.3003		
								620	710.000	0.3469		
								630	664.000	0.3911		
								640	600.000	0.4317		
								648	545.000	0.4611		
								652	508.000	0.4746		
								656	462.000	0.4871		
								704	416.000	0.5097		
								710	382.000	0.5251		
								720	329.000	0.5480		
								730	293.000	0.5680		
								740	281.000	0.5664		
								750	252.000	0.6035		
								802	233.000	0.6222		
								820	213.000	0.6480		
								830	198.000	0.6612		
								840	184.000	0.6735		
								850	170.000	0.6849		
								900	158.000	0.6955		
								918	138.000	0.7126		
								930	127.000	0.7228		
								952	111.000	0.7396		
								1010	103.000	0.7520		
								1030	94.600	0.7647		
								1040	90.200	0.7706		
								1100	84.000	0.7818		
								1130	78.000	0.7974		
								1150	74.200	0.8072		
								1200	70.500	0.8119		
								1230	67.000	0.8252		
								1300	60.300	0.8375		
								1330	57.100	0.8488		
								1350	55.600	0.8560		
								1404	55.600	0.8610		
								1430	57.100	0.8704		
								1450	58.700	0.8778		
								1510	58.700	0.8853		
								1524	60.300	0.8907		
								1530	60.300	0.8930		
								1604	55.600	0.9057		
								1640	51.000	0.9180		
								1738	45.400	0.9360		
								1830	41.400	0.9505		
								1900	40.100	0.9584		
								1930	38.900	0.9660		
								2006	38.900	0.9750		
								2040	37.700	0.9834		
								2110	36.500	0.9906		
								2220	34.200	1.0065		
								2254	33.000	1.0138		
								2320	31.900	1.0192		
								2400	31.400	1.0273		

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.00038589.



EVENT OF APRIL 24, 1970
COSHOCTON, OHIO WATERSHED 95

COSHOCTON, OHIO WATERSHED 97

LOCATION: Coshocton Co., Ohio; 10 mi. NE of Coshocton; Little Mill Creek, Walbonding River, Muskingum River Basin.

AREA: 4580.00 acres 7.16 sq. miles

MONTHLY PRECIPITATION AND RUNOFF (inches)													COSHOCTON, OHIO WATERSHED 97	
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual	
1970 P	2.39	1.86	3.45	5.91	4.06	3.26	3.29	0.57	3.57	3.82	2.90	2.71	37.79	
Q	1.524	1.675	1.629	4.174	1.261	0.280	0.136	0.013	0.058	0.175	0.638	1.262	12.825	
STA AV P	2.95	2.36	3.46	3.49	3.74	4.16	4.43	2.72	2.50	2.24	2.52	2.38	36.96	
Q	1.713	1.601	2.377	2.031	1.206	0.681	0.624	0.209	0.124	0.164	0.345	0.833	12.109	
ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS														
	Maximum Discharge		1 Hour		2 Hours		6 Hours		12 Hours		1 Day		2 Days	
	Date	Rate	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.
1970	4-24	0.287	4-24	0.271	4-24	0.470	4-24	0.794	4-24	0.966	4-24	1.135	4-1	1.329
													1-28	1.786
MAXIMUMS FOR PERIOD OF RECORD														
	6-28	0.720	6-28	0.660	6-28	1.150	7-5	2.235	7-5	2.646	1-21	3.240	1-20	3.540
	1957		1957		1957		1969		1969		1959		1959	1937

NOTES: Watershed conditions: Cover of 18% cropland, 50% grassland, 28% woodland, 4% miscellaneous, improved practice. For map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1956-59, USDA Misc. Pub. 945, p. 26.34-5. For Geology description and map, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1962, USDA Misc. Pub. 1070, pp. 26.36-1 and 26.37-2. Precipitation data from rain gages 27, 54, 56 and 91. Precipitation and runoff records began Jan. 1937. For long-time precipitation records, see National Weather Service records at Coshocton, Ohio.

1970 DAILY PRECIPITATION (inches)													COSHOCTON, OHIO WATERSHED 97	
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
1	2.14S	0.0	0.0	0.89	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
2	0.14S	0.78	0.11	1.20	0.45	0.02E	0.0	0.0	0.0	0.15	1.37	0.0		
3	0.16S	0.14S	0.25	0.0	0.0	0.47	0.0	0.0	0.68	0.0	0.0	0.31		
4	0.15S	0.0	0.74	0.0	0.11	0.3	0.0	0.0	0.15	0.0	0.0	0.0		
5	0.05S	0.0	0.0	0.0	0.05	0.41	0.0	0.0	0.0	0.0	0.0	0.0		
6	0.06S	0.0	0.0	0.16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
7	0.10S	0.15S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
8	0.0	0.16	0.0	0.0	0.0	0.0	1.46	0.0	0.03E	0.0	0.0	0.0		
9	0.0	0.26	0.01S	0.0	0.0	0.0	0.16	0.18	0.0	0.0	0.0	0.0		
10	0.0	0.0	0.0	0.0	0.0	0.0	0.05E	0.0	0.0	0.30	0.15	0.0		
11	0.13S	0.0	0.0	0.0	0.12	0.0	0.0	0.0	0.0	1.23	0.0	0.46		
12	0.0	0.04S	0.42S	0.0	0.68	0.31E	0.0	0.0	0.0	0.24	0.08	0.65		
13	0.0	0.03S	0.24S	0.68	1.30	0.0	0.0	0.0	0.0	0.23	0.0	0.11		
14	0.0	0.0	0.11S	0.08	0.0	0.0	0.0	0.0	0.0	0.24	0.65	0.0		
15	0.0	0.30M	0.03S	0.0	0.0	0.0	0.39	0.0	0.0	0.0	0.15	0.0		
16	0.0	0.0	0.05S	0.0	0.34	0.08E	0.0	0.01	0.0	0.0	0.0	0.27		
17	0.07E	0.0	0.21S	0.0	0.0	1.15	0.0	0.0	0.0	0.0	0.0	0.07		
18	0.07S	0.0	0.09S	0.0	0.0	0.01	0.0	0.0	0.05E	0.0	0.0	0.0		
19	0.0	0.0	0.14	0.32	0.0	0.0	0.04E	0.09	0.0	0.0	0.0	0.0		
20	0.03S	0.0	0.09	0.50	0.0	0.0	0.27	0.0	0.01E	0.07	0.22	0.0		
21	0.0	0.0	0.0	0.0	0.0	0.38	0.0	0.0	0.03	0.48	0.0	0.17S		
22	0.0	0.0	0.41S	0.0	0.0	0.0	0.0	0.21	0.0	0.0	0.0	0.50		
23	0.0	0.0	0.0	0.12	0.02E	0.0	0.09	0.0	0.0	0.0	0.0	0.07S		
24	0.0	0.0	0.0	1.95	0.58	0.0	0.0	0.0	0.16	0.0	0.0	0.0		
25	0.06E	0.0	0.23	0.0	0.39	0.01E	0.0	0.0	1.43	0.0	0.04S	0.04S		
26	0.07M	0.0	0.14	0.0	0.0	0.34	0.0	0.0	0.73	0.0	0.0	0.0		
27	0.08S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.29	0.0	0.08S	0.05S		
28	0.03S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.08	0.0		
29	1.04	0.18S	0.0	0.0	0.0	0.07	0.22	0.0	0.0	0.41	0.38	0.0		
30	0.0	0.0	0.0	0.0	0.0	0.0	0.59	0.0	0.0	0.46	0.0	0.0		
31	0.0	0.0	0.0	0.0	0.0	0.0	0.07	0.0	0.0	0.0	0.0	0.0		
TOTAL	2.39	1.86	3.45	5.91	4.06	3.26	3.29	0.57	3.57	3.82	2.90	2.71		
STA AV	2.95	2.36	3.46	3.49	3.74	4.16	4.43	2.72	2.50	2.24	2.52	2.38		

NOTES: For daily air temperatures in the vicinity, see table for Watershed W-95, p. 26.035-1. Precipitation amounts are for rain gages 27, 54, 56 and 91. STA AV based on 34 yr period.

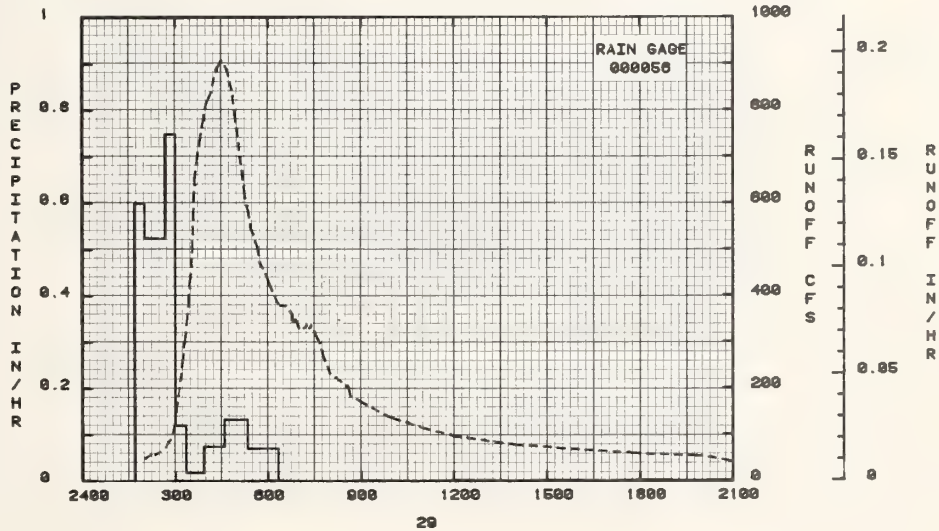
1970 MEAN DAILY DISCHARGE (cfs) COSHOCTON, OHIO WATERSHED 97												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	4.50	11.27	2.60	8.85	6.82	1.77	0.55	0.43	0.00	0.11	1.79	4.96
2	4.14	60.11	2.80	218.11	8.73	1.65	0.47	0.27	0.00	0.11	13.19	4.14
3	3.64E	29.47E	7.53	37.79	6.70	2.92	0.44	0.21	0.26	0.24	13.15	4.82
4	3.38E	16.10E	36.67	21.33	5.85	2.22	0.52	0.26	1.45	0.12	5.46	5.79
5	3.14	13.20E	27.32	15.00	5.38	4.71	0.38	0.17	0.18	0.08	4.08	4.67
6	2.91	11.45	14.54	12.87	4.65	2.12	0.34	0.12	0.06	0.07	3.08	3.94
7	2.50	9.74	11.05	11.02	4.20	1.60	0.28	0.09	0.04	0.07	2.44	3.51
8	2.15E	9.56	8.93	8.86	3.91	1.36	0.75	0.07	0.03	0.07	2.02	3.25
9	2.06E	31.72	7.65	7.79	3.51	1.19	4.31	0.09	0.02	0.07	1.77	3.13
10	2.02	19.72	6.73	6.79	3.19	1.08	1.94	0.22	0.02	0.19	1.97	2.81
11	1.98	13.14	5.99	6.13	3.08	1.01	1.16	0.11	0.01	6.49	1.73	3.81
12	1.90	11.00E	5.55E	5.73	6.03	2.44	0.74	0.07	0.01	1.46	1.76	31.59
13	1.77	9.88E	5.38	11.63	62.26	1.64	0.59	0.05	0.01	2.93	1.68	16.96
14	1.69	8.88E	5.14	13.93	22.15	1.12	0.50	0.04	0.01	1.71	3.28	10.47
15	1.69	7.96E	4.97	9.90	12.60	1.07	0.65	0.04	0.01	1.96	11.26	7.77
16	1.69	7.13E	4.89	8.31	12.37	1.72	1.04	0.03	0.00	0.88	6.14	8.72
17	2.55	6.36E	4.73	7.53	9.80	5.66	0.40	0.03	0.00	0.69	4.82	9.48
18	3.71	5.65E	5.72	6.62	7.77	4.90	0.33	0.02	0.00	0.57	3.92	7.63
19	2.52E	5.22E	9.82	8.00	6.45	1.63	0.31	0.02	0.01	0.51	3.51	6.89
20	2.02E	5.06E	13.51	26.46	5.35	1.21	0.79	0.02	0.00	0.52	4.25	5.73
21	1.71E	4.81E	10.31	12.86	4.61	2.12	0.57	0.02	0.01	1.58	3.61	5.33
22	1.17E	4.57E	12.26	9.44	3.94	1.48	0.32	0.02	0.01	1.44	3.02	21.82
23	0.95E	4.43E	12.81	8.45	3.55	1.06	0.31	0.03	0.00	0.57	2.41	15.79
24	0.95E	4.20E	10.94	213.09	4.16	0.89	0.30	0.03	0.00	0.81	1.94	10.34
25	1.73E	3.65E	10.22	39.10	7.32	0.81	0.21	0.02	3.56	0.69	1.98	8.42
26	8.14	2.92	16.74	22.43	5.14	1.08	0.20	0.02	1.46	0.59	2.35	7.15
27	4.12	2.64	12.13	15.34	3.45	1.31	0.23	0.01	3.10	0.50	2.64	5.99
28	10.53E	2.55	9.98	12.03	2.99	3.75	0.22	0.01	0.50	0.44	2.55	5.31
29	169.31E		9.18	9.56	2.59	0.75	0.29	0.01	0.24	0.63	4.48	4.66
30	27.29		8.19	8.20	2.11	0.63	2.30	0.00	0.15	4.31	6.49	4.13
31	15.33		7.23	1.94	1.94		0.83	0.00		2.85		3.77
MEAN	9.458	11.513	10.113	26.772	7.826	1.797	0.847	0.079	0.373	1.087	4.094	7.832
INCHES	1.524	1.675	1.629	4.174	1.261	0.280	0.136	0.013	0.058	0.175	0.638	1.262
STA AV	1.713	1.601	2.377	2.031	1.206	0.881	0.624	0.209	0.124	0.164	0.345	0.833

NOTES: To convert CFS to IN/DAY, multiply by 0.0051969. STA AV based on 34 yr period.

1970			SELECTED RUNOFF EVENT			COSHOCTON, OHIO			WATERSHED 97		
ANTECEDENT CONDITIONS			RAINFALL			RUNOFF					
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.	
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)	
EVENT OF JANUARY 29, 1970											
	PG 000056			EG 000056							
1-29	0.0	0.019	1-29	140	0.0	0.0	1-29	200	49.900	0.0	
				200	0.5997	0.20		212	57.500	0.0023	
				240	0.5251	0.55		220	57.500	0.0040	
				300	0.7496	0.80		230	63.700	0.0062	
				320	0.1200	0.84		240	72.900	0.0087	
WATERSHED CONDITIONS:											
Cover of 18%, cropland; 50%,					355	0.0171	0.85	250	89.600	0.0116	
grassland; 28%, woodland;					435	0.0750	0.90	256	110.000	0.0138	
4%, miscellaneous; watershed					520	0.1333	1.00	300	135.000	0.0156	
in improved practice.					620	0.0700	1.07	304	170.000	0.0178	
								308	202.000	0.0205	
								314	260.000	0.0255	
								318	298.000	0.0295	
								320	322.000	0.0317	
								324	362.000	0.0366	
								326	388.000	0.0393	
								328	426.000	0.0422	
								330	449.000	0.0454	
								332	481.000	0.0487	
								333	504.000	0.0505	
								334	550.000	0.0524	
								335	574.000	0.0544	
								336	610.000	0.0565	
								338	654.000	0.0611	
								344	710.000	0.0758	
								350	750.000	0.0916	
								356	790.000	0.1082	
								400	814.999	0.1198	
								410	840.000	0.1496	
								420	890.000	0.1808	
								430	908.000	0.2133	
								440	890.000	0.2457	
								450	845.000	0.2770	
								456	790.000	0.2947	
								500	760.000	0.3059	
								506	700.000	0.3217	

1970 SELECTED RUNOFF EVENT			COSHOCTON, OHIO			WATERSHED 97		
ANTECEDENT CONDITIONS			RAINFALL			RUNOFF		
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Rate
No-Day	(inches)	(inches)	No-Day	of Day	(in/hr)	(inches)	No-Day	of Day
								(cfs)
								Acc.
								(inches)
EVENT OF JANUARY 29, 1970 (CONTINUED)								
				1-29			510	666.000
							516	610.000
							524	569.000
							526	550.000
							532	532.000
							540	504.000
							544	472.000
							550	460.000
							600	435.000
							608	412.000
							620	383.000
							624	378.000
							634	378.000
							646	362.000
							650	343.000
							654	349.000
							700	329.999
							710	329.999
							715	336.000
							720	329.999
							724	336.000
							730	322.000
							740	298.000
							750	260.000
							800	232.000
							836	202.000
							840	183.000
							910	164.000
							950	140.000
							1015	130.000
							1100	114.000
							1200	96.000
							1400	76.600
							1800	57.500
							2000	52.500
							2400	40.700

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.00021654.



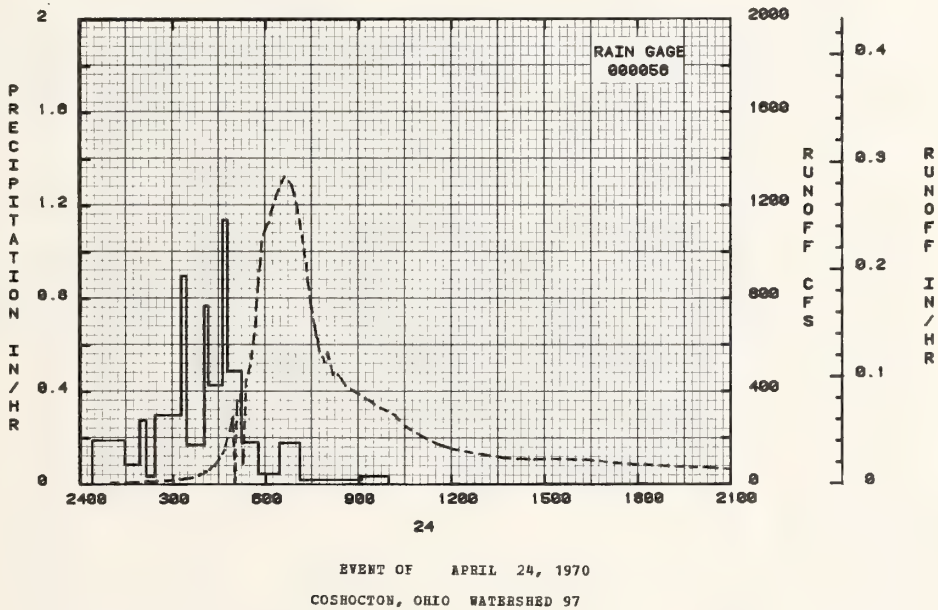
EVENT OF JANUARY 29, 1970
COSHOCTON, OHIO WATERSHED 97

1970 SELECTED RUNOFF EVENT			COSHOCTON, OHIO WATERSHED 97							
ANTECEDENT CONDITIONS			RAINFALL				RUNOFF			
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)
EVENT OF APRIL 24, 1970										
RG 000056			RG 000056							
4-24	0.0	0.002	4-24	23	0.0	0.0	4-24	100	8.880	0.0
				126	0.1905	0.20		130	9.860	0.0010
				154	0.0857	0.24		152	10.900	0.0018
				207	0.2769	0.30		230	14.100	0.0035
				224	0.0353	0.31		300	19.100	0.0053
WATERSHED CONDITIONS: Cover of 18%, cropland; 50%, grassland; 28%, woodland; 4%, miscellaneous; watershed in improved practice.				316	0.3000	0.57		320	24.200	0.0069
				326	3.9000	0.72		338	31.200	0.0087
				401	0.1714	0.82		350	39.700	0.0102
				408	0.7714	0.91		354	44.900	0.0108
				436	0.4286	1.11		400	52.500	0.0119
				446	1.1400	1.30		404	57.500	0.0127
				513	0.4889	1.52		410	65.200	0.0140
				546	0.1818	1.62		414	72.900	0.0150
				626	0.0450	1.65		420	84.100	0.0167
				706	0.1800	1.77		430	114.000	0.0203
				906	0.0200	1.81		436	135.000	0.0230
				558	0.0346	1.84		440	152.000	0.0251
								442	170.000	0.0263
								446	202.000	0.0290
								452	250.000	0.0339
								456	290.000	0.0378
								500	2.200	0.0399
								504	362.000	0.0425
								510	388.000	0.0506
								516	91.500	0.0558
								522	453.000	0.0617
								526	481.000	0.0684
								530	512.999	0.0756
								532	550.000	0.0794
								534	574.000	0.0835
								536	610.000	0.0878
								538	650.000	0.0924
								540	690.000	0.0972
								542	770.000	0.1025
								544	840.000	0.1083
								546	890.000	0.1146
								550	974.000	0.1281
								552	1046.000	0.1354
								558	1094.000	0.1586
								606	1130.000	0.1907
								610	1172.000	0.2073
								620	1242.000	0.2509
								630	1298.000	0.2968
								636	1326.000	0.3252
								650	1290.999	0.3913
								656	1242.000	0.4187
								700	1199.999	0.4364
								706	1130.000	0.4616
								710	1070.000	0.4775
								714	1010.000	0.4925
								718	950.000	0.5066
								720	890.000	0.5133
								724	840.000	0.5258
								726	790.000	0.5317
								730	740.000	0.5428
								734	690.000	0.5531
								738	634.000	0.5627
								740	625.999	0.5672
								744	574.000	0.5759
								750	550.000	0.5881
								754	527.000	0.5959
								800	569.000	0.6078
								810	472.000	0.6266
								820	472.000	0.6436
								834	426.000	0.6663
								850	402.000	0.6902
								900	388.000	0.7045
								920	362.000	0.7316
								930	343.000	0.7443
								1010	298.000	0.7906
								1030	250.000	0.8104
								1100	210.000	0.8353
								1130	176.000	0.8562
								1154	158.000	0.8707
								1200	152.000	0.8741

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.00021654.

1970	SELECTED RUNOFF EVENT					COSHOCTON, OHIO WATERSHED 97				
ANTECEDENT CONDITIONS			RAINFALL			RUNOFF				
Date Mo-Day	Rainfall (inches)	Runoff (inches)	Date Mo-Day	Time of Day	Intensity (in/hr)	Acc. (inches)	Date Mo-Day	Time of Day	Rate (cfs)	Acc. (inches)
EVENT OF APRIL 24, 1970 (CONTINUED)										
							4-24	1300	127.000	0.9043
								1340	114.000	0.9217
								1430	107.000	0.9416
								1440	107.000	0.9455
								1500	110.000	0.9533
								1530	110.000	0.9652
								1600	105.000	0.9768
								1620	105.000	0.9844
								1714	91.500	1.0035
								1800	84.100	1.0181
								1900	76.600	1.0355
								2020	69.800	1.0566
								2140	63.700	1.0759
								2240	60.600	1.0894
								2330	57.500	1.1001
								2400	57.500	1.1063

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.00021654.



COSHOCTON, OHIO WATERSHED 174

LOCATION: Coshocton Co., Ohio; 10 mi. NE of Coshocton; Tuscarawas River, Muskingum River Basin.

AREA: 52.80 acres

MONTHLY PRECIPITATION AND RUNOFF (inches)														COSHOCTON, OHIO WATERSHED 174			
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual			
1970	P	2.47	1.76	3.27	5.37	3.43	3.48	3.03	0.39	3.61	3.59	2.74	2.41	35.55			
	Q	1.481	1.181	1.310	3.261	0.397	0.162	0.976	0.000	0.055	0.114	0.443	1.098	9.577			
STA AV	P	2.34	2.06	3.63	3.47	3.22	3.03	4.15	2.41	2.46	1.90	2.59	2.31	33.57			
	Q	0.841	1.081	2.263	1.572	0.653	0.287	0.535	0.085	0.050	0.074	0.180	0.452	8.072			
ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																	
		Maximum Discharge		1 Hour		2 Hours		Maximum Volume for Selected Time Interval		12 Hours		1 Day		2 Days		8 Days	
		Date	Rate	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.
1970		1-29	0.464	1-29	0.348	1-29	0.503	4- 2	0.741	4- 1	1.060	4- 1	1.222	4- 1	1.339	1-28	1.754
MAXIMUMS FOR PERIOD OF RECORD																	
		7- 5	1.085	4-25	0.820	4-25	1.110	7- 5	1.802	7- 5	2.154	7- 5	2.365	3- 9	2.540	3- 4	3.710
		1969		1961		1961		1969		1969		1969		1964		1964	

NOTES: Watershed conditions: Cover of 15% hardwoods, 2% reforested, 67% grassland, 16% miscellaneous, watershed in improved practice. For map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1960-61, USDA Misc. Pub. 994, p. 26.30-4. For Geology description and map, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1962, USDA Misc. Pub. 1070, pp. 26.38-1 and 26.30-3. Precipitation data from rain gage 107. Precipitation and runoff records began June 1960. For long-time precipitation records, see National Weather Service records at Coshocton, Ohio.

1970 DAILY PRECIPITATION (inches)													COSHOCTON, OHIO WATERSHED 174	
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
1	0.14S	0.0	0.0	0.87	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
2	0.14S	0.70	0.08	1.18	0.44	0.0	0.0	0.0	0.0	0.21	1.04	0.0		
3	0.15S	0.14S	0.22	0.0	0.0	0.86	0.0	0.0	0.0	0.0	0.0	0.29		
4	0.19S	0.0	0.75	0.0	0.08	0.0	0.0	0.0	0.0	0.15	0.0	0.0		
5	0.05S	0.0	0.0	0.0	0.02E	0.34	0.0	0.0	0.0	0.0	0.0	0.0		
6	0.06S	0.0	0.0	0.10E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
7	0.10S	0.15S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
8	0.0	0.14	0.0	0.0	0.0	0.0	1.18	0.0	0.0	0.0	0.0	0.0		
9	0.0	0.26	0.01S	0.0	0.0	0.0	0.19	0.15	0.0	0.0	0.0	0.0		
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.32	0.10	0.0		
11	0.13S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.18	0.0	0.40		
12	0.0	0.04S	0.42S	0.0	0.60	0.10	0.0	0.0	0.0	0.20	0.14	0.60		
13	0.0	0.03S	0.24S	0.40	1.00	0.0	0.0	0.0	0.0	0.15	0.0	0.10		
14	0.0	0.0	0.11S	0.08	0.0	0.0	0.0	0.0	0.0	0.17	0.60	0.0		
15	0.0	0.30M	0.03S	0.0	0.0	0.0	0.29	0.0	0.0	0.0	0.15	0.0		
16	0.0	0.0	0.05S	0.0	0.33	0.10	0.0	0.05	0.0	0.0	0.0	0.25		
17	0.07E	0.0	0.21S	0.0	0.0	1.30	0.0	0.0	0.0	0.0	0.0	0.06		
18	0.07S	0.0	0.09S	0.0	0.0	0.01E	0.0	0.0	0.0	0.0	0.0	0.0		
19	0.0	0.0	0.12	0.20	0.0	0.0	0.10	0.02E	0.0	0.0	0.0	0.0		
20	0.03S	0.0	0.08S	0.60	0.0	0.0	0.33	0.0	0.0	0.05	0.22	0.0		
21	0.0	0.0	0.0	0.0	0.0	0.40	0.0	0.0	0.09	0.42	0.0	0.10S		
22	0.0	0.0	0.41S	0.0	0.0	0.0	0.0	0.17	0.0	0.0	0.0	0.49		
23	0.0	0.0	0.0	0.08	0.0	0.0	0.08	0.0	0.0	0.0	0.0	0.05S		
24	0.0	0.0	0.0	1.86	0.47	0.0	0.0	0.0	0.06	0.0	0.0	0.0		
25	0.06E	0.0	0.20	0.0	0.45	0.0	0.0	0.0	1.69	0.0	0.0	0.03S		
26	0.07M	0.0	0.07	0.0	0.0	0.37	0.0	0.0	0.72	0.0	0.0	0.0		
27	0.11S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.30	0.0	0.05S	0.04S		
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.05	0.0		
29	1.10	0.18S	0.0	0.0	0.0	0.0	0.45	0.0	0.0	0.41	0.39	0.0		
30	0.0	0.0	0.0	0.0	0.0	0.0	0.41	0.0	0.0	0.48	0.0	0.0		
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
TOTAL	2.47	1.76	3.27	5.37	3.43	3.48	3.03	0.39	3.61	3.59	2.74	2.41		
STA AV	2.34	2.06	3.63	3.47	3.22	3.03	4.15	2.41	2.46	1.90	2.59	2.31		

NOTES: For daily air temperatures in the vicinity, see table for Watershed W-95, p. 26.035-1. Precipitation amounts are for rain gage 107. STA AV based on 11 yr period, part-year records included.

1970 MEAN DAILY DISCHARGE (cfs) COSHOCTON, OHIO WATERSHED 174												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.027	0.099	0.010	0.367	0.022	0.001	0.003	0.001	0.0	0.0	0.004	0.024
2	0.024	0.747	0.013	2.429	0.058	0.001	0.003	0.0	0.0	0.0	0.263	0.017
3	0.021	0.192	0.095	0.252	0.030	0.047	0.002	0.0	0.0	0.0	0.070	0.034
4	0.319	0.094	0.602	0.139	0.021	0.305	0.001	0.0	0.0	0.0	0.017	0.044
5	0.017	0.069	0.214	0.099	0.019	0.036	0.001	0.0	0.0	0.0	0.013	0.019
6	0.013	0.050	0.126	0.083	0.017	0.005	0.001	0.0	0.0	0.0	0.011	0.015
7	0.010	0.350	0.089	0.069	0.015	0.002	0.0	0.0	0.0	0.0	0.010	0.013
8	0.010	0.120	0.068	0.047	0.013	0.001	0.044	0.0	0.0	0.0	0.008	0.013
9	0.008	0.470	0.052	0.036	0.011	0.001	0.724	0.0	0.0	0.0	0.007	0.013
10	0.007	0.161	0.034	0.030	0.010	0.001	0.007	0.0	0.0	0.0	0.006	0.011
11	0.007	0.099	0.033	0.024	0.010	0.001	0.005	0.0	0.0	0.122	0.005	0.059
12	0.006	0.069	0.030	0.021	0.008	0.001	0.003	0.0	0.0	0.007	0.009	0.528
13	0.005	0.047	0.033	0.074	0.302	0.001	0.002	0.0	0.0	0.021	0.013	0.150
14	0.005	0.036	0.033	0.057	0.050	0.0 T	0.001	0.0	0.0	0.034	0.070	0.089
15	0.005	0.033	0.024	0.039	0.024	0.0	0.002	0.0	0.0	0.002	0.139	0.064
16	0.005	0.033	0.019	0.030	0.059	0.001	0.002	0.0	0.0	0.001	0.033	0.115
17	0.220	0.033	0.019	0.024	0.028	0.161	0.0	0.0	0.0	0.001	0.019	0.093
18	0.058	0.044	0.060	0.021	0.015	0.023	0.0	0.0	0.0	0.001	0.017	0.059
19	0.022	0.038	0.127	0.042	0.013	0.003	0.0 T	0.0	0.0	0.001	0.015	0.047
20	0.013	0.017	0.127	0.340	0.011	0.001	0.004	0.0	0.0	0.0 T	0.035	0.036
21	0.008	0.013	0.073	0.075	0.010	0.013	0.003	0.0	0.0	0.008	0.025	0.033
22	0.307	0.020	0.115	3.059	0.008	0.005	0.0 T	0.0	0.0	0.004	0.015	0.372
23	0.007	0.022	0.128	0.045	0.007	0.004	0.0 T	0.0	0.0	0.001	0.011	0.163
24	0.007	0.017	0.108	2.186	0.011	3.004	0.0	0.0	0.0	0.001	0.008	0.110
25	0.026	0.013	0.124	0.246	0.046	0.003	0.0	0.0	0.075	0.001	0.008	0.073
26	0.118	0.010	0.187	0.147	0.021	0.008	0.0	0.0	0.021	0.001	0.010	0.064
27	0.046	0.010	0.094	0.099	0.006	0.010	0.0	0.0	0.026	0.001	0.011	0.050
28	0.284	0.010	0.078	0.069	0.005	0.005	0.0	0.0	0.0	0.0	0.013	0.046
29	2.133		0.081	0.047	0.003	0.004	0.024	0.0	0.0	0.002	0.066	0.036
30	0.221		0.059	0.033	0.002	0.003	0.029	0.0	0.0	0.063	0.047	0.024
31	0.126		0.047		0.302		0.003	0.0		0.010		0.021
MEAN	0.1060	0.0936	0.0937	0.2411	0.0284	0.0120	0.0054	0.0	0.0041	0.0082	0.0327	0.0786
INCHES	1.481	1.181	1.310	3.261	0.357	0.162	0.076	0.000	0.055	0.114	0.443	1.098
STA AV	0.841	1.081	2.263	1.572	0.653	0.287	0.535	0.085	0.050	0.074	0.180	0.452

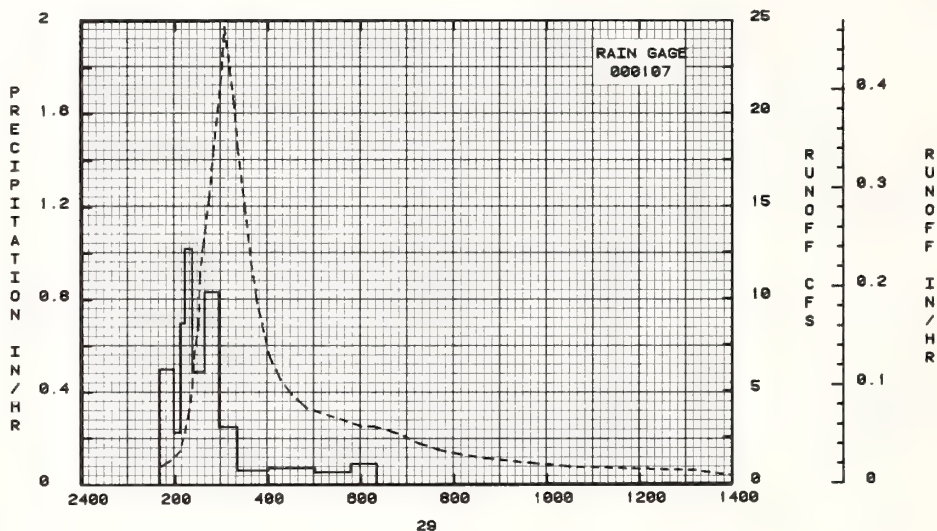
NOTES: To convert CFS to IN/DAY, multiply by 0.45079. STA AV based on 11 yr period, part-year records included.

1970 SELECTED RUNOFF EVENT COSHOCTON, OHIO WATERSHED 174												
ANTECEDENT CONDITIONS			RAINFALL									
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Runoff	Date	Intensity	Acc.
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	Mo-Day	(inches)	(inches)
EVENT OF JANUARY 29, 1970												
RG 000107												
1-29	0.0	0.034	1-29	140	0.0	0.0	1-29	142	1.000	0.0		
				158	0.4999	0.15		154	1.320	0.0044		
				206	0.2251	0.18		200	1.560	0.0071		
				212	0.6993	0.25		206	1.840	0.0103		
				222	1.0200	0.42		208	2.160	0.0116		
WATERSHED CONDITIONS:												
Cover of 15%, hardwoods; 2%, reforested; 67%, grassland; 16%, miscellaneous; watershed in improved practice.												
				238	0.4872	0.55		210	2.480	0.0130		
				256	0.8339	0.80		214	3.220	0.0166		
				320	0.2499	0.50		218	4.100	0.0212		
				400	0.0600	0.94		222	5.380	0.0271		
				590	0.0700	1.01		224	6.880	0.0310		
				546	0.0522	1.05		230	8.620	0.0456		
				620	0.0882	1.10		232	11.500	0.0519		
								236	12.900	0.0672		
								244	15.500	0.1028		
								250	18.300	0.1346		
								258	21.300	0.1842		
								304	24.700	0.2274		
								316	20.700	0.3127		
								322	17.800	0.3488		
								330	15.000	0.3899		
								338	12.000	0.4237		
								346	9.800	0.4510		
								354	8.270	0.4736		
								402	6.880	0.4926		
								416	5.650	0.5201		
								430	4.850	0.5431		
								450	4.100	0.5711		
								600	3.120	0.6502		
								616	3.120	0.6658		
								646	2.740	0.6933		
								716	2.160	0.7163		
								740	1.840	0.7313		
								810	1.560	0.7473		
								850	1.320	0.7653		
								940	1.100	0.7842		

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.01878287.

1970 SELECTED RUNOFF EVENT						COSHOCTON, OHIO WATERSHED 174					
ANTECEDENT CONDITIONS			RAINFALL			RUNOFF					
Date Mo-Day	Rainfall (inches)	Runoff (inches)	Date Mo-Day	Time of Day	Intensity (in/hr)	Acc. (inches)	Date Mo-Day	Time of Day	Rate (cfs)	Acc. (inches)	
EVENT OF JANUARY 29, 1970 (CONTINUED)											
							1-29	1030	0.900	0.7999	
								1312	0.690	0.8403	
								1800	0.390	0.8893	
								2400	0.290	0.9282	

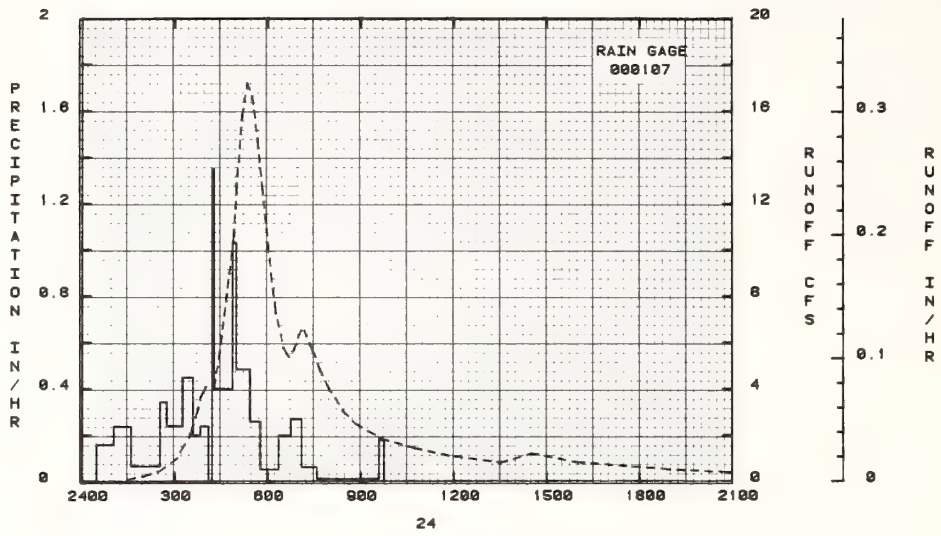
NOTES: To convert runoff in CFS to IN/HR, multiply by 0.01878287.



EVENT OF JANUARY 29, 1970
COSHOCTON, OHIO WATERSHED 174

1970			COSHOCTON, OHIO WATERSHED 174							
SELECTED RUNOFF EVENT										
ANTECEDENT CONDITIONS			RAINFALL			RUNOFF				
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)
EVENT OF APRIL 24, 1970										
RG 000107			RG 000107							
4-24	0.0	0.002	4-24	28	0.0	0.0	4-24	130	0.090	0.0
				102	0.1588	0.09		200	0.250	0.0016
				135	0.2364	0.22		230	0.450	0.0049
				231	0.0643	0.28		304	1.000	0.0126
				245	0.3429	0.36		314	1.440	0.0164
WATERSHED CONDITIONS: Cover of 15%, hardwoods; 2%, reforested; 67%, grassland; 16%, miscellaneous; watershed in improved practice.				315	0.2400	0.48		320	1.630	0.0193
				335	0.4500	0.63		330	2.000	0.0250
				350	0.2000	0.68		336	2.480	0.0292
				405	0.2400	0.74		346	3.220	0.0381
				412	0.0	0.74		350	3.640	0.0424
				416	1.3500	0.83		400	4.100	0.0545
				452	0.4000	1.07		416	4.100	0.0750
				459	1.0286	1.19		426	5.380	0.0898
				525	0.4846	1.40		434	6.880	0.1052
				546	1.2571	1.49		440	8.103	0.1192
				621	0.0514	1.52		450	9.800	0.1472
				645	0.2000	1.60		454	10.600	0.1600
				705	0.2700	1.69		503	12.900	0.1821
				735	0.0600	1.72		510	15.800	0.2270
				935	0.0100	1.74		520	17.200	0.2787
				945	0.1800	1.77		530	16.600	0.3316
								540	14.700	0.3805
								550	12.400	0.4229
								600	10.200	0.4583
								608	8.620	0.4819
								616	7.250	0.5018
								630	5.780	0.5304
								640	5.380	0.5479
								650	5.650	0.5652
								704	6.530	0.5919
								710	6.530	0.6041
								722	5.900	0.6274
								732	5.380	0.6451
								740	4.850	0.6579
								756	4.100	0.6803
								826	3.020	0.7137
								850	2.480	0.7344
								940	1.840	0.7682
								1044	1.440	0.8011
								1150	1.100	0.8273
								1330	0.810	0.8573
								1430	1.200	0.8762
								1600	0.810	0.9046
								1900	0.510	0.9420
								2400	0.370	0.9834

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.01878287.



EVENT OF APRIL 24, 1970
COSHOCTON, OHIO WATERSHED 174

COSHOCTON, OHIO WATERSHED 194

LOCATION: Coshocton Co., Ohio 10 mi. NE of Coshocton; Tuscarawas River, Muskingum River Basin.

AREA: 187.00 acres

MONTHLY PRECIPITATION AND RUNOFF (inches)										COSHOCTON, OHIO WATERSHED 194				
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
1970	P	2.47	1.76	3.27	5.37	3.43	3.48	3.03	0.39	3.61	3.59	2.74	2.41	35.55
	Q	1.945	1.893	2.044	4.116	1.178	0.500	0.217	0.049	0.099	0.302	0.740	1.547	14.631
STA AV	P	2.39	2.16	3.39	3.30	3.19	3.03	4.15	2.41	2.46	1.90	2.59	2.31	33.28
	Q	1.310	1.620	3.114	2.301	1.350	0.587	0.716	0.155	0.109	0.173	0.348	0.764	12.548
ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS														
Maximum Discharge Date Rate														
1 Hour Date Vol.														
2 Hours Date Vol.														
Maximum Volume for Selected Time Interval														
6 Hours Date Vol.														
12 Hours Date Vol.														
1 Day Date Vol.														
2 Days Date Vol.														
8 Days Date Vol.														
1970	1-29 0.298 1-29 0.245 1-29 0.372 4- 2 0.607 4- 1 0.893 4- 1 1.118 4- 1 1.316 1-28 1.963													
MAXIMUMS FOR PERIOD OF RECORD														
7- 5 0.959 4-25 0.680 4-25 0.930 7- 5 1.620 7- 5 1.979 7- 5 2.269 3- 9 2.600 3- 4 3.890														
1969 1961 1961 1969 1969 1969 1964 1964														

NOTES: Watershed conditions: Cover of 21% hardwoods, 2% reforested, 58% grassland, 11% cultivated, 8% miscellaneous, watershed in improved practice. For map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1960-61, USDA Misc. Pub. 994, p. 26.30-4. For Geology description and map, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1962, USDA Misc. Pub. 1070, pp. 26.39-1 and 26.30-3. Precipitation data from rain gage 107. Precipitation and runoff records began Jan. 1960. For long-time precipitation records, see National Weather Service records at Coshocton, Ohio.

1970	DAILY PRECIPITATION (inches)												COSHOCTON, OHIO WATERSHED 194	
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
1	0.145	0.0	0.0	0.87	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
2	0.145	0.70	0.08	1.18	0.44	0.0	0.0	0.0	0.0	0.21	1.04	0.0		
3	0.155	0.145	0.22	0.0	0.0	0.86	0.0	0.0	0.60	0.0	0.0	0.29		
4	0.195	0.0	0.75	0.0	0.08	0.0	0.0	0.0	0.15	0.0	0.0	0.0		
5	0.055	0.0	0.0	0.0	0.02E	0.34	0.0	0.0	0.0	0.0	0.0	0.0		
6	0.065	0.0	0.0	0.10E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
7	0.105	0.155	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
8	0.0	0.14	0.0	0.0	0.0	0.0	1.18	0.0	0.0	0.0	0.0	0.0		
9	0.0	0.26	0.015	0.0	0.0	0.0	0.19	0.15	0.0	0.0	0.0	0.0		
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.32	0.10	0.0		
11	0.135	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.18	0.0	0.40		
12	0.0	0.045	0.425	0.0	0.60	0.10	0.0	0.0	0.0	0.20	0.14	0.60		
13	0.0	0.035	0.245	0.40	1.00	0.0	0.0	0.0	0.0	0.15	0.0	0.10		
14	0.0	0.0	0.115	0.08	0.0	0.0	0.0	0.0	0.0	0.17	0.60	0.0		
15	0.0	0.308	0.035	0.0	0.0	0.0	0.29	0.0	0.0	0.0	0.15	0.0		
16	0.0	0.0	0.055	0.0	0.33	0.10	0.0	0.05	0.0	0.0	0.0	0.25		
17	0.07E	0.0	0.215	0.0	0.0	1.30	0.0	0.0	0.0	0.0	0.0	0.06		
18	0.075	0.0	0.095	0.0	0.0	0.01E	0.0	0.0	0.0	0.0	0.0	0.0		
19	0.0	0.0	0.12	0.20	0.0	0.0	0.10	0.02E	0.0	0.0	0.0	0.0		
20	0.035	0.0	0.085	0.60	0.0	0.0	0.33	0.0	0.0	0.95	0.22	0.0		
21	0.0	0.0	0.0	0.0	0.0	0.40	0.0	0.0	0.09	0.42	0.0	0.105		
22	0.0	0.0	0.415	0.0	0.0	0.0	0.0	0.17	0.0	0.0	0.0	0.49		
23	0.0	0.0	0.0	0.08	0.0	0.0	0.08	0.0	0.0	0.0	0.0	0.055		
24	0.0	0.0	0.0	1.86	0.47	0.0	0.0	0.0	0.06	0.0	0.0	0.0		
25	0.06E	0.0	0.20	0.0	0.49	0.0	0.0	0.0	1.69	0.0	0.0	0.035		
26	0.07M	0.0	0.07	0.0	0.0	0.37	0.0	0.0	0.72	0.0	0.0	0.0		
27	0.115	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.30	0.0	0.055	0.045		
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.05	0.0		
29	1.10	0.0	0.185	0.0	0.0	0.0	0.45	0.0	0.0	0.41	0.39	0.0		
30	0.0	0.0	0.0	0.0	0.0	0.0	0.41	0.0	0.0	0.48	0.0	0.0		
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
TOTAL	2.47	1.76	3.27	5.37	3.43	3.48	3.03	0.39	3.61	3.59	2.74	2.41		
STA AV	2.39	2.16	3.39	3.30	3.19	3.03	4.15	2.41	2.46	1.90	2.59	2.31		

NOTES: For daily air temperatures in the vicinity, see table for Watershed W-95, p. 26.035-1. Precipitation amounts are for rain gage 107. STA AV based on 11 yr period.

1970 MEAN DAILY DISCHARGE (cfs) COSHOCTON, OHIO WATERSHED 194												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.215	0.670	0.131	1.266	0.378	0.086	0.042	0.024	0.004	0.010	0.062	0.152
2	0.215	2.870	0.156	8.102	0.534	0.094	0.037	0.018	0.003	0.016	1.372	0.131
3	0.201	1.110	0.442	1.487	0.378	0.422	0.037	0.015	0.002	0.012	0.457	0.212
4	0.188	0.670E	2.040	0.945	0.340	0.142	0.037	0.018	0.004	0.010	0.189	0.302
5	0.188	0.549	1.047	0.730	0.307	0.270	0.037	0.021	0.006	0.010	0.142	0.188
6	0.176	0.437	0.675	0.648	0.274	0.131	0.037	0.018	0.005	0.008	0.112	0.176
7	0.164	0.417	0.545	0.557	0.258	0.112	0.037	0.015	0.007	0.006	0.094	0.152
8	0.164	0.592	0.458	0.458	0.229	0.094	0.254	0.015	0.007	0.006	0.079	0.141
9	0.152	1.810	0.361	0.378	0.215	0.086	0.193	0.022	0.004	0.006	0.059	0.131
10	0.131	0.886	0.395	0.322	0.215	0.086	0.072	0.021	0.004	0.022	0.083	0.121
11	0.131	0.622	0.305	0.305	0.201	0.079	0.052	0.015	0.005	0.761	0.058	0.284
12	0.131	0.481	0.289	0.289	0.312	0.091	0.042	0.015	0.006	0.067	0.068	1.806
13	0.121	0.378	0.274	0.441	1.570	0.079	0.037	0.015	0.006	0.194	0.058	0.726
14	0.168	0.322	0.244	0.436	0.453	0.072	0.037	0.015	0.005	0.056	0.245	0.513
15	0.178	0.305	0.201	0.361	0.307	0.072	0.048	0.015	0.004	0.037	0.438	0.390
16	0.192	0.289	0.188	0.289	0.414	0.071	0.047	0.015	0.003	0.028	0.215	0.503
17	0.185	0.274	0.201	0.274	0.307	0.749	0.037	0.012	0.003	0.028	0.169	0.479
18	0.265	0.326	0.341	0.274	0.258	0.192	0.037	0.008	0.004	0.028	0.152	0.359
19	0.176	0.296	0.647	0.356	0.229	0.094	0.038	0.006	0.005	0.024	0.131	0.322
20	0.164	0.215	0.718	1.320	0.215	0.086	0.085	0.006	0.006	0.019	0.207	0.274
21	0.164	0.215	0.545	0.570	0.201	0.205	0.034	0.006	0.008	0.055	0.142	0.253
22	0.164	0.215	0.691	0.458	0.176	0.103	0.021	0.008	0.003	0.037	0.121	1.232
23	0.164	0.189	0.680	0.405	0.176	0.072	0.021	0.010	0.002	0.024	0.103	0.730
24	0.164	0.176	0.592	7.053	0.219	0.058	0.021	0.010	0.002	0.021	0.086	0.528
25	0.220	0.154	0.652	1.450	0.342	0.058	0.021	0.010	0.045	0.021	0.094	0.417
26	0.601	0.131	0.866	0.942	0.226	0.094	0.021	0.008	0.079	0.021	0.112	0.378
27	0.283	0.141	0.592	0.730	0.131	0.072	0.021	0.006	0.117	0.015	0.121	0.307
28	0.854	0.131	0.522	0.592	0.121	0.052	0.021	0.006	0.012	0.010	0.112	0.258
29	6.865		0.531	0.481	0.112	0.056	0.112	0.005	0.010	0.031	0.245	0.243
30	1.410		0.437	0.417	0.094	0.047	0.138	0.004	0.010	0.601E	0.240	0.229
31	0.885		0.378		0.086		0.032	0.004		0.182E		0.215
MEAN	0.4929	0.5312	0.5180	1.0780	0.2984	0.1310	0.0551	0.0125	0.0261	0.0765	0.1937	0.3921
INCHES	1.945	1.893	2.044	4.116	1.178	0.500	0.217	0.049	0.099	0.302	0.740	1.547
STA AV	1.310	1.620	3.114	2.301	1.350	0.587	0.716	0.155	0.109	0.173	0.348	0.764

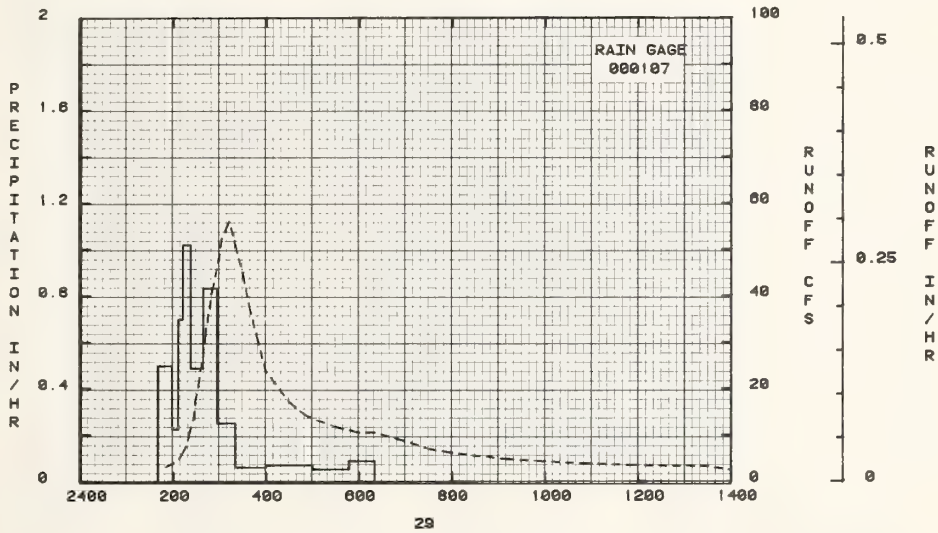
NOTES: To convert CFS to IN/DAY, multiply by 0.12728. STA AV based on 11 yr period.

1970 SELECTED RUNOFF EVENT COSHOCTON, OHIO WATERSHED 194												
ANTECEDENT CONDITIONS			RAINFALL				RUNOFF					
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.		
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)		
EVENT OF JANUARY 29, 1970												
RG 000107 FG 000107												
1-29	0.0	0.031	1-29	140	0.0	0.0	1-29	150	3.150	0.0		
				158	0.4999	0.15		200	4.080	0.0032		
				206	0.2251	0.18		208	5.180	0.0065		
				212	0.6993	0.25		216	7.460	0.0110		
				222	1.0200	0.42		220	10.300	0.0141		
WATERSHED CONDITIONS: 21%, hardwoods; 2%, re- forested; 58%, grassland; 11%, cultivated; 8%, miscel- laneous; watershed in improved practice.				238	0.4872	0.55		226	13.600	0.0204		
				256	0.8339	0.80		228	17.400	0.0231		
				320	0.2499	0.90		232	21.000	0.0299		
				400	0.0600	0.94		238	27.200	0.0427		
				500	0.0700	1.01		242	33.100	0.0534		
				546	0.0522	1.05		250	41.400	0.0797		
				620	0.0882	1.10		258	47.600	0.1112		
								302	52.500	0.1289		
								312	56.100	0.1769		
								320	50.800	0.2147		
								330	44.300	0.2567		
								340	36.200	0.2922		
								350	29.600	0.3213		
								400	23.500	0.3448		
								412	21.000	0.3684		
								430	17.000	0.3986		
								450	14.300	0.4263		
								458	13.600	0.4362		
								530	11.700	0.4720		
								600	10.500	0.5014		
								620	10.500	0.5200		
								650	9.140	0.5460		
								730	7.000	0.5745		
								800	6.080	0.5918		
								910	4.790	0.6254		
								1000	4.250	0.6454		
								1100	3.750	0.6666		
								1200	3.450	0.6857		
								1330	3.150	0.7120		
								1800	2.360	0.7777		

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.00530340.

1970			SELECTED RUNOFF EVENT					COSHOCTON, OHIO			WATERSHED 194		
ANTECEDENT CONDITIONS			RAINFALL				RUNOFF						
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.			
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)			
EVENT OF JANUARY 29, 1970 (CONTINUED)													
									2400	1.750	0.8431		

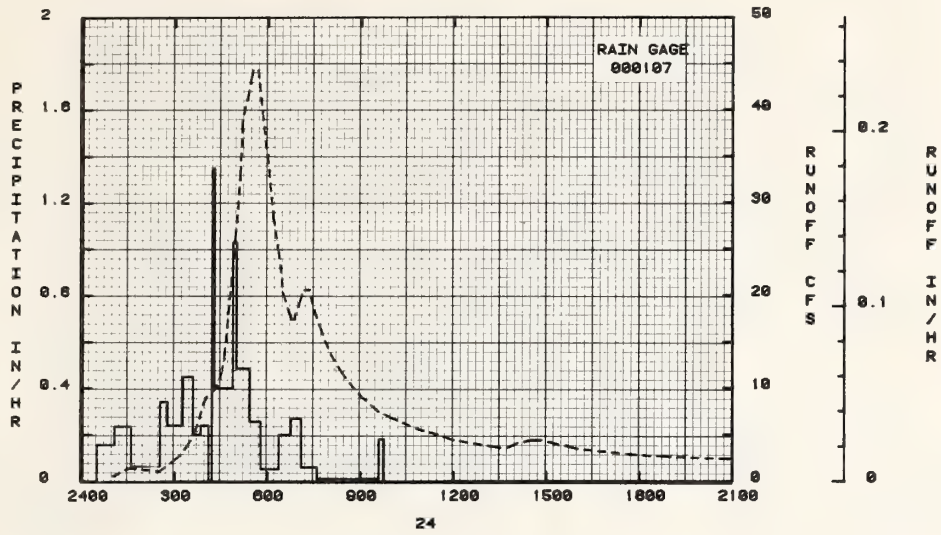
NOTES: To convert runoff in CFS to IN/HR, multiply by 0.00530340.



EVENT OF JANUARY 29, 1970
COSHOCTON, OHIO WATERSHED 194

1970 SELECTED RUNOFF EVENT			COSHOCTON, OHIO WATERSHED 194							
ANTECEDENT CONDITIONS			RAINFALL				RUNOFF			
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)
EVENT CP APRIL 24, 1970										
4-24	RG 000107			28	0.0	0.0	4-24	100	0.590	0.0
	0.0	0.003	4-24	102	0.1588	0.09		130	1.390	0.0026
				135	0.2364	0.22		230	1.070	0.0091
				231	0.0643	0.28		300	2.360	0.0136
				245	0.3429	0.36		310	2.850	0.0159
WATERSHED CONDITIONS:				315	0.2400	0.48		322	3.750	0.0194
21%, hardwoods; 2%, re-				335	0.4500	0.63		330	4.420	0.0223
forested; 58%, grassland; 11%,				350	0.2000	0.68		344	6.080	0.0288
cultivated; 8%, miscel-				405	0.2400	0.74		356	8.580	0.0366
laneous; watershed in im-				412	0.0	0.74		402	9.140	0.0413
proved practice.				416	1.3500	0.83		422	10.300	0.0585
				452	0.4000	1.07		430	11.700	0.0663
				459	1.0286	1.19		436	13.600	0.0730
				525	0.4846	1.40		442	17.400	0.0812
				546	0.2571	1.49		450	22.000	0.0951
				621	0.0514	1.52		458	27.200	0.1125
				645	0.2000	1.60		506	33.100	0.1338
				705	0.2700	1.69		510	38.900	0.1465
				735	0.9600	1.72		520	41.400	0.1820
				935	0.0100	1.74		530	44.300	0.2199
				945	0.1800	1.77		540	44.300	0.2590
								550	38.900	0.2958
								600	34.300	0.3282
								610	28.400	0.3559
								622	24.000	0.3837
								630	20.100	0.3993
								640	18.300	0.4163
								646	17.400	0.4258
								650	17.400	0.4320
								706	20.100	0.4585
								710	20.600	0.4657
								720	20.600	0.4839
								730	18.300	0.5011
								746	15.800	0.5252
								802	13.600	0.5460
								830	11.100	0.5766
								900	9.140	0.6034
								934	7.460	0.6283
								1010	6.590	0.6506
								1050	5.620	0.6721
								1116	5.180	0.6845
								1200	4.420	0.7032
								1310	3.750	0.7285
								1330	3.600	0.7350
								1344	3.600	0.7395
								1404	4.080	0.7463
								1430	4.420	0.7561
								1450	4.420	0.7639
								1510	4.080	0.7714
								1600	3.450	0.7880
								1740	2.850	0.8158
								1900	2.590	0.8350
								2100	2.360	0.8613
								2200	2.150	0.8733
								2400	1.950	0.8950

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.00530340.



EVENT OF APRIL 24, 1970
COSHOCTON, OHIO WATERSHED 194

COSHOCTON, OHIO WATERSHED 182

LOCATION: Coshocton Co., Ohio; 10 mi NE of Coshocton, Tuscarawas River, Walhounding River, Muskingum River Basin.

AREA: 69.60 acres

MONTHLY PRECIPITATION AND RUNOFF (inches)														COSHOCTON, OHIO WATERSHED 182		
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual			
1970	P	2.62	2.05	3.45	5.63	3.73	3.83	3.29	0.66	3.94	3.97	2.85	2.87	38.89		
	Q	1.651	1.732	1.865	3.765	0.994	0.279	0.070	0.005	0.025	0.135	0.689	1.584	12.798		
STA AV	P	2.59	1.88	3.63	3.61	3.60	2.77	4.84	2.20	2.80	2.14	2.83	2.76	35.64		
	Q	1.120	1.268	2.417	1.888	1.213	0.197	0.904	0.077	0.018	0.069	0.202	0.762	10.135		
ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																
	Maximum Discharge		1 Hour		2 Hours		Maximum Volume for Selected Time Interval		6 Hours		12 Hours		1 Day		2 Days	
	Date	Date	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.
1970	1-29	0.332	1-29	0.272	1-29	0.404	1-29	0.632	4- 1	0.837	4- 1	1.026	4- 1	1.215	1-28	1.835
MAXIMUMS FOR PERIOD OF RECORD																
	7- 5	0.966	7- 5	0.486	7- 5	0.696	7- 5	1.537	7- 5	1.832	7- 5	2.190	3- 9	2.64C	3- 4	3.960
	1969		1969		1969		1969		1969		1969		1964		1964	

NOTES: Watershed conditions: Cover of 3% hardwoods, 9% pastured woodland, 5% reforested, 49% grassland, 34% cultivated, prevailing practice except for 10% of area which was strip cropped. For map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1966, USDA Misc. Pub. 1226, p. 26.40-2. For Geology description, see foregoing reference, p. 26.40-1. Gage for Watershed 182 is 400 ft. upstream from that of Watershed 183, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1963, USDA Misc. Pub. 1164 and earlier publications of this series. Precipitation data from rain gage 119. Precipitation and runoff records began January, 1964. For long-time precipitation records, see National Weather Service records at Coshocton, Ohio.

1970 DAILY PRECIPITATION (inches)														COSHOCTON, OHIO WATERSHED 182	
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec			
1	0.14S	0.0	0.0	0.95	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
2	0.14S	0.75	0.09	1.10	0.40	0.0	0.0	0.0	0.0	0.20	1.05	0.0	0.0	0.0	
3	0.15S	0.14S	0.23	0.0	0.0	0.93	0.0	0.0	0.57	0.0	0.0	0.35	0.0	0.0	
4	0.19S	0.0	0.78	0.0	0.06	0.0	0.0	0.0	0.40	0.0	0.0	0.0	0.0	0.0	
5	0.05S	0.0	0.0	0.0	0.04	0.20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
6	0.06S	0.0	0.0	0.15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
7	0.10S	0.15S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
8	0.0	0.24	0.0	0.0	0.0	0.0	1.23	0.0	0.02	0.0	0.0	0.0	0.0	0.0	
9	0.0	0.40	0.01S	0.0	0.0	0.0	0.24	0.19	0.0	0.0	0.0	0.0	0.0	0.0	
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.30	0.19	0.0	0.0	0.0	
11	0.13S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.43	0.0	0.50	0.0	0.0	
12	0.0	0.04S	0.42S	0.0	0.60	0.10	0.0	0.0	0.0	0.22	0.09	0.65	0.0	0.0	
13	0.0	0.03S	0.24S	0.52	1.29	0.0	0.0	0.0	0.0	0.18	0.0	0.10	0.0	0.0	
14	0.0	0.0	0.11S	0.10	0.0	0.0	0.0	0.0	0.0	0.19	0.70	0.0	0.0	0.0	
15	0.0	0.30M	0.03S	0.0	0.0	0.0	0.25	0.0	0.0	0.0	0.15	0.0	0.0	0.0	
16	0.0	0.0	0.05S	0.0	0.37	0.10	0.0	0.15	0.0	0.0	0.0	0.32	0.0	0.0	
17	0.07E	0.0	0.21S	0.0	0.0	1.43	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.05	
18	0.07S	0.0	0.09S	0.0	0.0	0.0	0.0	0.0	0.05E	0.0	0.0	0.0	0.0	0.0	
19	0.0	0.0	0.15	0.30	0.0	0.0	0.08	0.02	0.0	0.0	0.0	0.0	0.0	0.0	
20	0.03S	0.0	0.08S	0.56	0.0	0.0	0.44	0.0	0.03E	0.05	0.25	0.0	0.0	0.0	
21	0.0	0.0	0.0	0.0	0.0	0.72	0.0	0.0	0.28	0.40	0.0	0.20S	0.0	0.0	
22	0.0	0.0	0.41S	0.0	0.0	0.0	0.0	0.30	0.0	0.0	0.0	0.50	0.0	0.0	
23	0.0	0.0	0.0	0.07	0.0	0.0	0.09	0.0	0.0	0.0	0.0	0.10	0.0	0.0	
24	0.0	0.0	0.0	1.88	0.54	0.0	0.0	0.0	0.09	0.0	0.0	0.0	0.0	0.0	
25	0.06E	0.0	0.27	0.0	0.43	0.02E	0.0	0.0	1.61	0.0	0.0	0.05S	0.0	0.0	
26	0.07M	0.0	0.10	0.0	0.0	0.28	0.0	0.0	0.61	0.0	0.0	0.0	0.0	0.0	
27	0.11S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.28	0.0	0.07S	0.05S	0.0	0.0	
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.05	0.0	0.0	0.0	
29	1.25	0.0	0.18S	0.0	0.0	0.05	0.48	0.0	0.0	0.43	0.30	0.0	0.0	0.0	
30	0.0	0.0	0.0	0.0	0.0	0.0	0.48	0.0	0.0	0.57	0.0	0.0	0.0	0.0	
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
TOTAL	2.62	2.05	3.45	5.63	3.73	3.83	3.29	0.66	3.94	3.97	2.85	2.87			
STA AV	2.59	1.88	3.63	3.61	3.60	2.77	4.84	2.20	2.80	2.14	2.83	2.76			

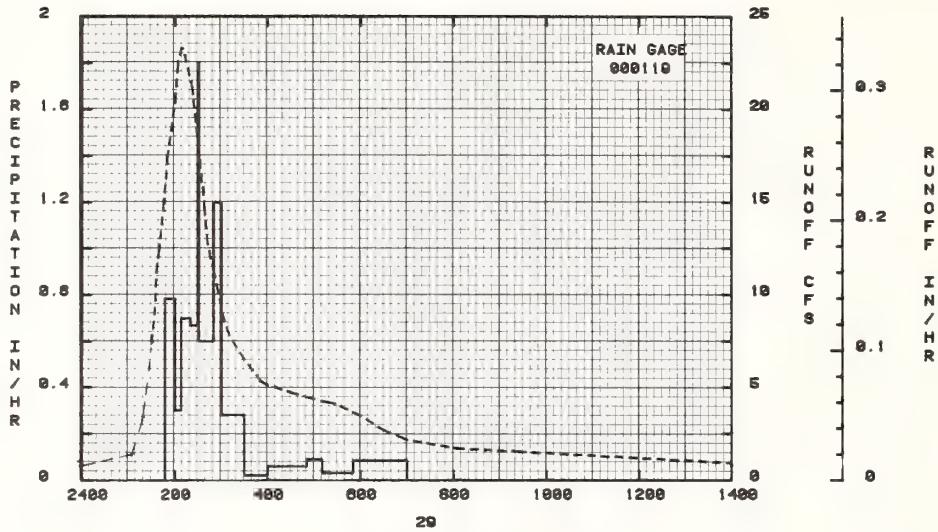
NOTES: For daily air temperatures in the vicinity, see table for Watershed W-95, p. 26.035-1. Precipitation amounts are for rain gage 119. STA AV based on 7 yr period.

1970 MEAN DAILY DISCHARGE (cfs) COSHOCTON, OHIO WATERSHED 182												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.055	0.196	0.030	0.429	0.118	0.015	0.004	0.001	0.0	0.0	0.017	0.048E
2	0.055	0.050	0.037	2.776	0.166	0.013	0.002	0.001	0.0	0.0	0.303	0.050
3	0.055	0.363	0.160	0.532	0.118	0.084	0.002	0.001	0.0	0.0	0.118	0.099
4	0.050	0.215	0.733	3.320	0.099	0.030	0.002	0.002	0.0	0.0	0.359	0.103
5	0.046	0.171	0.294	0.243	0.088	0.054	0.002	0.001	0.0	0.0	0.055	0.068
6	0.039	0.155	0.214	0.214	0.078	0.025	0.002	0.0	0.0	0.0	0.050	0.059
7	0.030	0.158	0.179	0.196	0.064	0.015	0.003	0.0	0.0	0.0	0.039	0.055
8	0.024	0.228	0.147	0.155	0.055	0.011	0.059	0.0	0.0	0.0	0.030	0.055
9	0.021	0.680	0.123	0.118	0.050	0.010	0.023	0.002	0.0	0.0	0.024	0.055
10	0.021	0.291	0.105	0.099	0.042	0.008	0.009	0.003	0.0	0.0	0.030	0.047
11	0.021	0.223	0.099	0.088	0.039	0.007	0.004	0.001	0.0	0.144	0.024	0.132
12	0.021	0.171	0.094	0.078	0.087	0.009	0.002	0.0	0.0	0.008	0.027	0.655
13	0.021E	0.131	0.094	0.154	0.654	0.007	0.002	0.0	0.0	0.038	0.030	0.265
14	0.024E	0.110	0.083	0.179	0.159	0.005	0.002	0.0	0.0	0.013	0.124	0.201E
15	0.027E	0.105	0.064	0.139	0.126	0.035	0.005	0.0	0.0	0.011	0.200	0.156E
16	0.027E	0.099	0.055	0.110	0.158	0.706	0.004	0.0	0.0	0.004	0.089	0.230
17	0.027E	0.094	0.069	0.099	0.118	0.286	0.001	0.0	0.0	0.003	0.073	0.189
18	0.027E	0.120	0.138	0.088	0.094	0.051	0.001	0.0	0.0	0.003	0.073	0.155
19	0.027E	0.110	0.238	0.127	0.078	0.015	0.001	0.0	0.0	0.003	0.068	0.126
20	0.027E	0.059	0.222	0.461	0.064	0.008	0.012	0.0	0.0	0.002	0.107	0.099
21	0.027E	0.046	0.163	0.175	0.050	0.060	0.001	0.0	0.0	0.010	0.069	0.095
22	0.027E	0.050	0.220	0.147	0.042	0.020	0.0	0.0	0.0	0.004	0.055	0.485E
23	0.027E	0.050	0.238	0.135	0.039	0.011	0.002	0.0	0.0	0.003	0.047	0.287
24	0.027E	0.053	0.196	2.426	0.046	0.008	0.002	0.0	0.0	0.003	0.042	0.207
25	0.151	0.041	0.234	0.487	0.068	0.007	0.002	0.0	0.048	0.003	0.036	0.155
26	0.319	0.030	0.333	0.297	0.057	0.017	0.002	0.0	0.008	0.002	0.027	0.131
27	0.081	0.033	0.214	0.233	0.030	0.039	0.002	0.0	0.017	0.002	0.027	0.110
28	0.293	0.030	0.187	0.196	0.024	0.004	0.003	0.0	0.0	0.001	0.027	0.099
29	2.587		0.192	0.163	0.019	0.006	0.023	0.0	0.0	0.011	0.080E	0.083
30	0.388		0.171	0.139	0.017	0.005	0.020	0.0	0.0	0.087	0.061E	0.068
31	0.254		0.138		0.017		0.003	0.0		0.038		0.059
MEAN	0.1558	0.1809	0.1763	0.3670	0.0937	0.0272	0.0066	0.0004	0.0024	0.0127	0.0671	0.1494
INCHES	1.651	1.732	1.869	3.765	0.994	0.279	0.070	0.005	0.025	0.135	0.689	1.584
STA AV	1.120	1.268	2.417	1.888	1.213	0.157	0.004	0.077	0.018	0.069	0.202	0.762

NOTES: To convert CFS to IN/DAY, multiply by 0.34198. STA AV based on 7 yr period.

1970 SELECTED RUNOFF EVENT COSHOCTON, OHIO WATERSHED 182												
ANTECEDENT CONDITIONS			RAINFALL									
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Runoff	Date	Acc.	
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)		(inches)	
EVENT OF JANUARY 29, 1970												
EG 000119			EG 000119									
1-29	0.0	0.039	1-29	147	0.0	0.0	1-29	130	7.460	0.0		
				200	0.7841	0.17		134	9.330	0.0080		
				208	0.3001	0.21		136	11.300	0.0129		
				220	0.7002	0.35		140	12.700	0.0243		
				229	0.6671	0.45		146	15.200	0.0442		
WATERSHED CONDITIONS:				231	1.8000	0.51		150	17.400	0.0597		
Cover of 3%, hardwoods; 9%,				250	0.6000	0.70		200	20.500	0.1047		
pastured woodland; 5%, re-				300	1.1994	0.90		204	22.600	0.1252		
forested; 49%, grassland;				330	0.2800	1.04		208	23.300	0.1470		
34%, miscellaneous, water-				400	0.0200	1.05		210	23.300	0.1580		
shed in improved practice.				450	0.0600	1.10		222	21.200	0.2214		
				510	0.0900	1.13		230	18.000	0.2587		
				550	0.0300	1.15		238	14.700	0.2898		
				700	0.0857	1.25		242	12.700	0.3028		
								250	11.300	0.3256		
								256	10.100	0.3408		
								304	8.570	0.3586		
								310	7.810	0.3703		
								330	6.510	0.4043		
								350	5.370	0.4325		
								400	5.110	0.4450		
								430	4.720	0.4800		
								500	4.350	0.5123		
								526	4.110	0.5384		
								600	3.450	0.5689		
								630	2.680	0.5907		
								700	2.160	0.6079		
								804	1.700	0.6372		
								933	1.500	0.6710		
								1400	0.903	0.7472		
								1800	0.731	0.7938		
								2400	0.482	0.8457		

NOTES: To convert runoff in CFS TO IN/HR, multiply by 0.31424907.



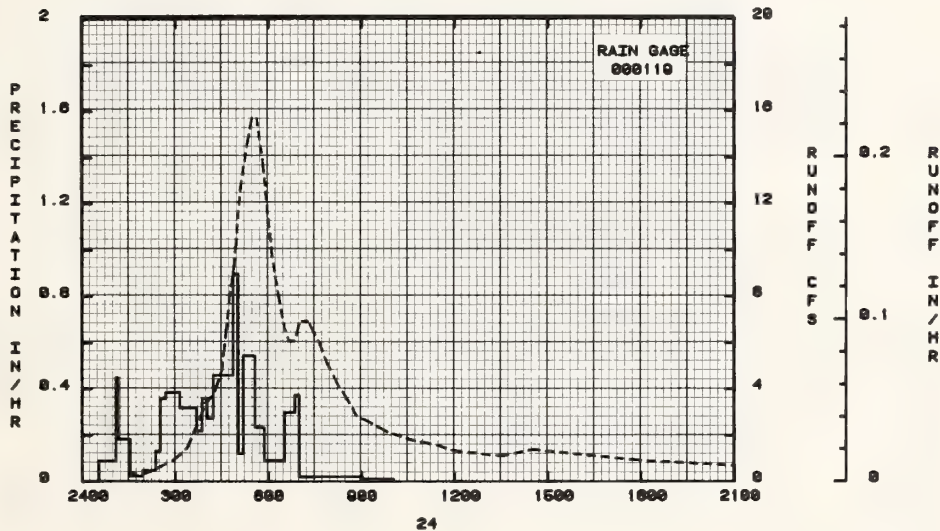
EVENT OF JANUARY 29, 1970
COSHOCTON, OHIO WATERSHED 182

1970 SELECTED RUNOFF EVENT						COSHOCTON, OHIO WATERSHED 182					
ANTECEDENT CONDITIONS			RAINFALL			RUNOFF					
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.	
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)	
EVENT OF APRIL 24, 1970											
4-24	RG 000119	0.006	4-24	RG 000119	32	0.0	4-24	130	0.395	0.0	
	0.07			105	0.0909	0.05		200	0.342	0.0026	
				109	0.4500	0.08		230	0.653	0.0061	
				132	0.1826	0.15		300	0.998	0.0120	
				157	0.0240	0.16		322	1.440	0.0184	
WATERSHED CONDITIONS:											
Cover of 3%, hardwoods; 9%,											
pastured woodland; 5%, re-											
forested; 49%, grassland;											
34%, miscellaneous, water-											
shed in improved practice.											
				222	0.0480	0.18		330	1.840	0.0215	
				231	0.1333	0.20		336	2.160	0.0243	
				241	0.3600	0.26		350	2.850	0.0326	
				309	0.3857	0.44		400	3.450	0.0401	
				341	0.3188	0.61		410	3.670	0.0485	
				352	0.2182	0.65		420	4.110	0.0577	
				402	0.3600	0.71		430	4.850	0.0683	
				413	0.2727	0.76		436	5.930	0.0760	
				452	0.4615	1.06		440	6.810	0.0820	
				502	0.9000	1.21		446	8.190	0.0927	
				512	0.1200	1.23		454	9.330	0.1093	
				534	0.5455	1.43		458	10.500	0.1187	
				552	0.2333	1.50		506	12.700	0.1407	
				632	0.0900	1.56		520	14.700	0.1863	
				652	0.3000	1.66		528	15.700	0.2152	
				700	0.3750	1.71		538	15.700	0.2525	
				902	0.0197	1.75		550	13.700	0.2944	
				1002	0.0100	1.76		600	11.300	0.3241	
								608	9.710	0.3441	
								620	8.000	0.3693	
								630	6.810	0.3869	
								640	6.070	0.4022	
								650	6.070	0.4166	
								700	6.810	0.4319	
								706	6.950	0.4417	
								716	6.950	0.4582	
								720	6.810	0.4647	
								730	6.360	0.4803	
								740	5.930	0.4949	
								754	5.110	0.5133	

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.01424907.

1970 SELECTED RUNOFF EVENT			COSHOCTON, OHIO WATERSHED 182									
ANTECEDENT CONDITIONS			RAINFALL			Acc.	RUNOFF			Acc.		
Date	Rainfall	Runoff	Date	Time	Intensity		Date	Time	Rate			
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)		
EVENT OF APRIL 24, 1970 (CONTINUED)												
							4-24	816	4.110	0.5374		
								830	3.670	0.5503		
								850	2.850	0.5658		
								920	2.520	0.5849		
								950	2.160	0.6016		
								1030	1.840	0.6206		
								1100	1.700	0.6332		
								1130	1.560	0.6448		
								1200	1.320	0.6551		
								1330	1.100	0.6610		
								1430	1.380	0.6987		
								1800	0.903	0.7556		
								2400	0.691	0.8237		

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.01424907.



EVENT OF APRIL 24, 1970
COSHOCTON, OHIO WATERSHED 182

COSHOCKTON, OHIO WATERSHED 166

LOCATION: Coshocton County, Ohio; 10 miles NE of Coshocton; Walhonding River, Muskingum River Basin.

AREA: 79.20 acres

MONTHLY PRECIPITATION AND RUNOFF (inches)								COSHOCKTON, OHIO WATERSHED 166						
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual	
1970	P	2.36	1.68	3.44	5.51	3.65	3.21	3.44	0.42	3.52	3.60	2.51	2.62	36.46
	Q	1.541	1.579	1.660	3.746	0.704	0.215	0.083	0.012	0.029	0.130	0.498	1.353	11.550
STA AV	P	2.64	2.19	3.34	3.30	3.82	3.91	4.37	2.73	2.62	2.08	2.51	2.26	35.78
	Q	1.142	1.073	2.096	1.608	1.308	0.273	1.457	0.113	0.036	0.066	0.251	0.571	10.394
ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS														
	Maximum Discharge Date	1 Hour Date Vol.		2 Hours Date Vol.		Maximum Volume for Selected Time Interval 6 Hours Date Vol.		12 Hours Date Vol.		1 Day Date Vol.		2 Days Date Vol.		8 Days Date Vol.
1970	1-29 0.308	1-29 0.260	1-29 0.384	4-24 0.621	4- 1 0.794	4- 1 0.995	4- 1 1.220	1-28 1.753						
MAXIMUMS FOR PERIOD OF RECORD														
	7-27 0.921	7- 5 0.539	7- 5 0.866	7- 5 1.593	7- 5 1.876	7- 5 2.054	7- 5 2.249	7- 4 3.215						
	1969	1969	1969	1969	1969	1969	1969	1969						

NOTES: Watershed conditions: Cover of 4%, hardwoods; 6%, reforested; 67%, grassland; 17%, cultivated; 6%, miscellaneous. Watershed in improved practice. For map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1969, USDA Misc. Pub. 1370, p. 26.41-7. Precipitation records began 1940. Runoff records began January 1, 1967. Precipitation data from rain gages 100 and 103. For long-time precipitation records, see National Weather Service records at Coshocton, Ohio.

1970 DAILY PRECIPITATION (inches)													COSHOCKTON, OHIO WATERSHED 166	
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
1	0.13S	J.0	0.0	0.88	0.0	J.0	0.0	0.0	0.0	0.0	0.0	0.0		
2	0.18S	0.64	0.09	1.13	0.47	0.0	0.0	0.0	0.0	0.17	1.03	0.0		
3	3.15S	3.14S	0.26	0.0	J.0	0.78E	0.2	0.0	0.70	J.0	J.0	0.30		
4	0.19S	0.0	0.73	0.0	0.08	0.0	0.0	0.0	0.16	0.0	0.0	0.0		
5	0.05S	0.0	0.0	J.0	0.92E	0.27	0.0	0.0	0.3	0.0	0.0	0.0		
6	0.36S	0.0	0.0	0.15E	0.0	0.0	0.0	0.0	0.0	J.0	0.0	0.0		
7	0.10S	0.15S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
8	0.0	0.13	0.0	0.0	0.0	0.0	1.25	J.0	0.02E	0.0	0.0	0.0		
9	0.0	0.25	0.01S	0.0	J.0	0.0	0.18	0.14	0.0	J.0	J.0	0.0		
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.34	0.15	0.0		
11	0.13S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.19	0.0	0.50		
12	J.0	0.04S	0.42S	0.0	0.65	0.12	0.0	0.0	0.0	0.19	0.11	0.63		
13	0.0	0.03S	0.24S	0.50	1.04	0.0	0.0	0.0	0.0	0.16	0.0	0.10		
14	J.0	J.0	0.11S	0.08	0.0	0.0	0.0	0.0	0.0	0.15	0.65	0.0		
15	0.0	0.30E	0.03S	0.0	0.0	0.0	0.44	0.0	0.0	0.0	0.14	0.0		
16	0.0	0.0	0.05S	0.0	0.32	0.08E	0.0	0.06	0.0	0.0	0.0	0.22		
17	0.07E	0.0	0.21S	0.0	0.0	1.15	0.0	0.0	0.0	0.0	0.0	0.05		
18	0.07S	0.0	0.09S	0.0	0.0	J.02	0.0	0.0	0.03E	0.0	J.0	0.0		
19	0.0	0.0	0.15	0.30	0.0	0.0	0.03	0.02E	J.0	0.0	0.0	0.0		
20	0.03S	0.0	0.09S	0.51	0.0	0.0	0.35	0.0	0.02E	0.05	0.25	0.0		
21	0.0	0.0	0.0	0.0	0.0	0.35	0.0	0.0	0.02	0.44	0.0	0.20S		
22	0.0	0.0	0.41S	0.0	J.0	0.0	0.0	J.15	0.0	J.0	0.0	0.45		
23	0.0	0.0	0.0	0.08	0.0	0.0	0.19	0.0	0.0	0.0	0.0	0.09S		
24	J.0	J.0	0.0	1.89	0.60	0.0	J.0	0.0	0.06	J.0	0.0	0.0		
25	0.06E	0.0	0.25	0.0	0.45	0.0	0.0	0.0	1.44	0.0	0.0	0.04S		
26	0.07E	0.0	0.13	0.0	0.0	0.39	0.0	0.0	0.77	J.0	0.0	J.0		
27	0.11S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.30	J.0	0.06S	0.05S		
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	J.0	0.0	0.0	0.37	0.0		
29	1.00	0.18S	0.0	0.0	0.0	0.04	0.64	0.0	0.0	0.39	0.43	0.0		
30	J.0	0.0	0.0	0.0	J.0	J.0	0.44	0.0	0.0	0.50	0.0	0.0		
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
TOTAL	2.36	1.68	3.44	5.51	3.65	3.21	3.44	0.42	3.52	3.60	2.91	2.62		
STA AV	2.64	2.19	3.34	3.30	3.82	3.91	4.37	2.73	2.62	2.08	2.51	2.26		

NOTES: For daily air temperatures for the vicinity, see table for Watershed #95, p. 26.035-1. Precipitation amounts are for rain gages 100 and 103. STA AV based on 31 yr period (1940-1970).

1970 MEAN DAILY DISCHARGE (cfs) COSHOCTON, OHIO WATERSHED 166												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.043	0.295	0.036	0.482	0.105	0.013	0.004	0.011	0.0	0.0	0.017	0.067
2	0.043	0.896	0.045	3.095	0.155	0.011	0.003	0.003	0.0	0.0 T	0.207	0.058
3	0.043	0.385	0.135	0.716	0.098	0.379	0.003	0.003	0.0	0.0	0.122	0.082
4	0.039	0.285	0.573	0.430	0.081	0.024	0.003	0.002	0.0	0.0	0.077	0.089
5	0.036	0.235	0.341	0.307	0.066	0.063	0.003	0.001	0.0	0.0	0.058	0.062
6	0.036	0.190	0.285	0.275	0.058	0.019	0.003	0.001	0.0	0.0	0.043	0.054
7	0.036	0.157	0.255	0.206	0.046	0.011	0.002	0.001	0.0	0.0	0.030	0.046
8	0.030	0.213	0.207	0.150	0.043	0.008	0.081	0.002	0.0	0.0	0.321	0.046
9	0.021	0.570	0.158	0.129	0.039	0.006	0.022E	0.002	0.0	0.0 T	0.017	0.046
10	0.019	0.322	0.123	0.110	0.033	0.005	0.009	0.032	0.0	0.001	0.025	0.039
11	0.021	0.295	0.098	0.092	0.030	0.005	0.005	0.001	0.0	0.145	0.017	0.094
12	0.021	0.220	0.087E	0.082	0.086	0.005	0.003	0.001	0.0	0.007	0.020	0.521
13	0.019	0.150	0.087	0.146	0.432	0.005	0.003	0.001	0.0	0.033	0.017	0.282
14	0.017	0.129	0.077	0.130	0.142	0.004	0.003	0.001	0.0	0.017	0.069	0.218
15	0.015	0.116	0.067E	0.098	0.107	0.005	0.010	0.001	0.0	0.011	0.132	0.176
16	0.019	0.098	0.067	0.082	0.141	0.007	0.004	0.001	0.0	0.008	0.067	0.213
17	0.062	0.087	0.067	0.072	0.092	0.233	0.002	0.001	0.0	0.006	0.062	0.183
18	0.073	0.105	0.117	0.062	0.077	0.055	0.002	0.001	0.0	0.004	0.058	0.143
19	0.050	0.095	0.199	0.095	0.058	0.019	0.002	0.001	0.0	0.003	0.050	0.129
20	0.058	0.058	0.217	0.350	0.044	0.013	0.006	0.001	0.0	0.004	0.081	0.110
21	0.051	0.050	0.180	0.172	0.037	0.033	0.003	0.0 T	0.0	0.020	0.050	0.098
22	0.036	0.054	0.214	0.150	0.030	0.015	0.003	0.0	0.0	0.019	0.039	0.387
23	0.033	0.054	0.220	0.123	0.031	0.009	0.003	0.0	0.0	0.008	0.030	0.265
24	0.030	0.045	0.190	2.915E	0.053	0.006	0.003	0.0	0.0	0.008	0.024	0.226
25	0.065	0.041	0.216	0.670	0.095	0.005	0.003	0.0	0.047	0.008	0.030	0.197
26	0.192	0.033	0.278	0.440	0.050	0.026	0.003	0.0	0.016	0.008	0.039	0.173
27	0.098	0.039	0.206	0.315	0.033	0.012	0.003	0.0	0.031	0.006	0.039	0.136
28	0.399	0.033	0.188	0.241	0.027	0.006	0.002	0.0	0.001	0.005	0.033	0.110
29	2.565		0.196	0.181	0.019	0.007	0.044	0.0	0.001	0.011	0.091	0.092
30	0.582		0.163	0.144	0.015	0.005	0.035	0.0	0.0 T	0.067	0.086	0.082
31	0.372		0.230		0.015		0.0	0.0		0.028		0.072
MEAN	0.1654	0.1877	0.1781	0.4155	0.0756	0.0239	0.0089	0.0013	0.0033	0.0139	0.0552	0.1452
INCHES	1.541	1.579	1.660	3.746	0.704	0.215	0.083	0.012	0.029	0.130	0.498	1.353
STA AV	1.142	1.073	2.096	1.608	1.308	0.273	1.457	0.113	0.036	0.066	0.251	0.971

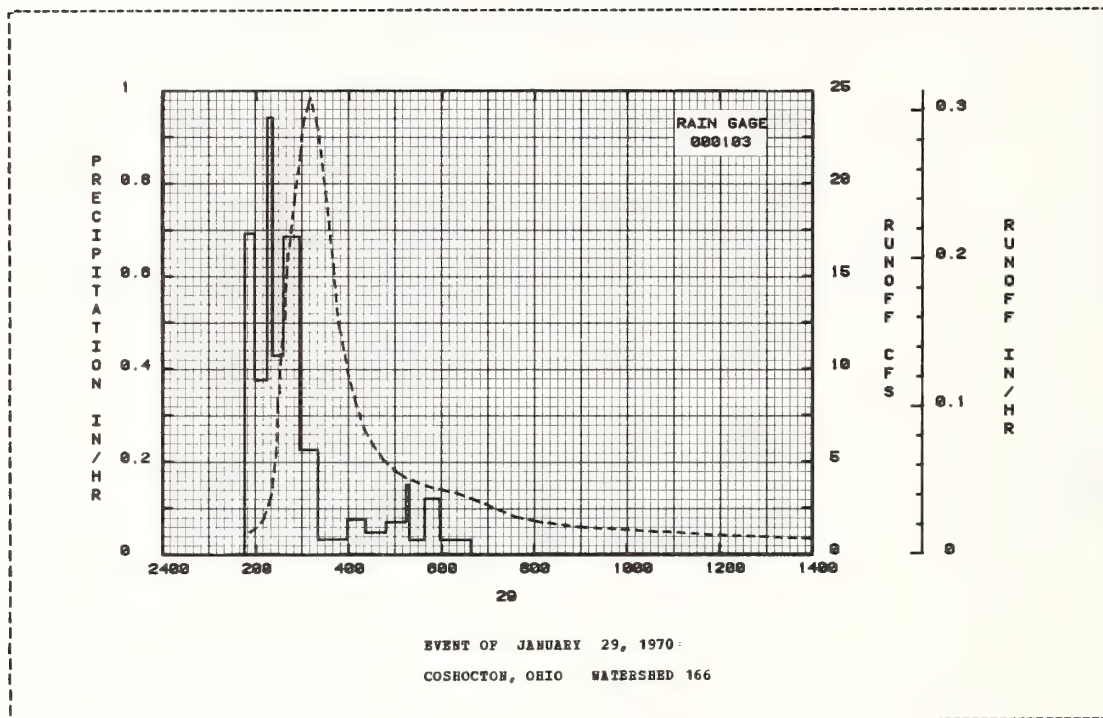
NOTES: To convert CFS to IN/DAY, multiply by 0.300526. STA AV based on 4 yr period (1967-1970).

1970			SELECTED RUNOFF EVENT			COSHOCTON, OHIO			WATERSHED 166		
ANTECEDENT CONDITIONS			RAINFALL			RUNOFF					
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.	
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)	
EVENT OF JANUARY 29, 1970											
RG 000103			RG 000103								
1-29	0.0	0.029	1-29	145	0.0	0.0	1-29	152	1.200	0.0	
				158	0.6927	0.15		200	1.440	0.0022	
				214	0.3751	0.25		210	1.920	0.0057	
				221	0.9426	0.36		216	2.700	0.0086	
				235	0.4285	0.46		220	3.260	0.0111	
WATERSHED CONDITIONS:				256	0.6860	0.70		222	4.100	0.0126	
Cover of 4%, hardwoods; 6%,				320	0.2249	0.79		226	5.390	0.0166	
reforested; 67%, grassland;				358	0.0316	0.81		228	8.370	0.0195	
17%, cultivated; 6%, miscel-				422	0.0750	0.84		230	8.750	0.0231	
laneous; watershed in im-				448	0.0462	0.86		232	10.800	0.0272	
proved practice.											
				514	0.0692	0.89		236	12.700	0.0370	
				518	0.1500	0.90		240	15.500	0.0488	
				538	0.0300	0.91		250	19.400	0.0852	
				558	0.1200	0.95		258	21.900	0.1197	
				638	0.0300	0.97		300	23.200	0.1291	
								310	24.600	0.1789	
								320	22.900	0.2285	
								330	19.400	0.2727	
								340	15.500	0.3091	
								346	12.500	0.3266	
								350	11.800	0.3367	
								400	9.580	0.3590	
								410	7.990	0.3773	
								420	6.740	0.3927	
								430	5.970	0.4060	
								444	5.110	0.4222	
								500	4.460	0.4382	
								514	4.100	0.4507	
								540	3.660	0.4718	
								600	3.460	0.4867	
								620	3.260	0.5007	
								640	2.970	0.5137	
								716	2.520	0.5286	
								736	2.000	0.5427	
								810	1.700	0.5558	

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.01252191.

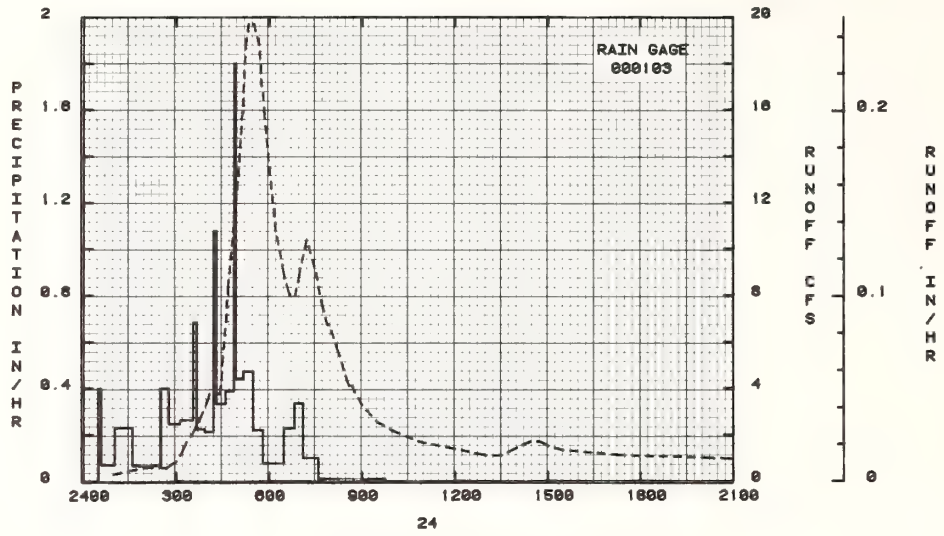
1970			SELECTED RUHOFF EVENT			COSHOCTON, OHIO			WATERSHED 166		
ANTECEDENT CONDITIONS			RAINFALL			RUHOFF					
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.	
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)	
EVENT OF JANUARY 29, 1970 (CONTINUED)											
							1-29	900	1.440	0.5722	
								1200	0.998	0.6180	
								1600	0.813	0.6634	
								1900	0.813	0.6939	
								2400	0.735	0.7424	

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.01252191.



1970			SELECTED RUNOFF EVENT			COSHOCTON, OHIO			WATERSHED 166			
ANTECEDENT CONDITIONS			RAINFALL			RUNOFF						
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.		
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)		
EVENT OF APRIL 24, 1970												
RG 000103			RG 000103									
4-24	0.0	0.003	4-24	29	0.0	0.0	4-24	100	0.315	0.0		
				35	0.4000	0.04		130	0.460	0.0024		
				101	0.0692	0.07		200	0.595	0.0057		
				135	0.2294	0.20		240	0.560	0.0105		
				212	0.0649	0.24		300	0.857	0.0135		
WATERSHED CONDITIONS: Cover of 4%, hardwoods, 6%, reforested; 67%, grassland; 17%, cultivated; 6%, miscel- laneous; watershed in in- proved practice.				230	0.0667	0.26		310	1.200	0.0156		
				245	0.4000	0.36		329	1.700	0.0186		
				307	0.2455	0.45		330	2.000	0.0225		
				332	0.2640	0.56		346	2.700	0.0303		
				339	0.6857	0.64		400	3.460	0.0393		
				355	0.2250	0.70		404	3.770	0.0423		
				412	0.2118	0.76		424	3.770	0.0580		
				417	1.0800	0.85		426	4.100	0.0596		
				435	0.3333	0.95		430	5.390	0.0636		
				452	0.3882	1.06		436	6.900	0.0713		
				455	1.8000	1.15		440	8.370	0.0777		
				510	0.4400	1.26		450	10.800	0.0977		
				529	0.4737	1.41		500	13.200	0.1228		
				548	0.2211	1.48		508	15.900	0.1471		
				628	0.0750	1.53		514	18.800	0.1688		
				649	0.2286	1.61		520	19.700	0.1929		
				705	0.3375	1.70		530	19.700	0.2340		
				735	0.1900	1.75		540	18.800	0.2741		
				945	0.0092	1.77		550	15.900	0.3103		
								600	13.500	0.3410		
								612	10.800	0.3714		
								630	8.750	0.4081		
								640	7.990	0.4256		
								650	7.990	0.4423		
								700	9.160	0.4602		
								712	10.400	0.4847		
								730	8.950	0.5211		
								742	7.610	0.5418		
								752	6.740	0.5568		
								756	6.740	0.5624		
								816	5.390	0.5877		
								834	4.100	0.6055		
								840	4.100	0.6106		
								900	3.260	0.6260		
								930	2.520	0.6441		
								1000	2.160	0.6588		
								1050	1.700	0.6789		
								1200	1.380	0.7014		
								1300	1.100	0.7169		
								1330	1.100	0.7238		
								1400	1.440	0.7318		
								1410	1.560	0.7349		
								1426	1.700	0.7403		
								1444	1.700	0.7467		
								1500	1.500	0.7520		
								1530	1.320	0.7608		
								1730	1.100	0.7911		
								2010	0.998	0.8261		
								2400	0.950	0.8729		

NOTES: To convert runoff in CPS to IN/HR, multiply by 0.01252191.



EVENT OF APRIL 24, 1970
COSHOCTON, OHIO WATERSHED 166

STILLWATER, OKLAHOMA WATERSHED W-1

LOCATION: Noble Co., Okla.; 15 mi. N. of Stillwater; Black Bear Creek, Arkansas River.

AREA: 16.70 acres

MONTHLY PRECIPITATION AND RUNOFF (inches)										STILLWATER, OKLAHOMA WATERSHED W-1									
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual					
1970	P	0.13	0.25	2.61	4.98	1.12	2.79	1.10	0.19	6.09	1.91	0.30	0.85	22.32					
	Q	0.0	0.0	1.989	3.557	0.014	0.010	0.0	0.0	0.099	0.115	0.0	0.030	5.815					
STA AV	P	0.59	1.02	1.99	2.48	4.87	3.99	3.92	2.79	3.66	2.39	1.53	1.11	30.35					
	Q	0.124	0.269	0.829	0.865	1.698	0.899	0.599	0.065	0.381	0.578	0.360	0.199	6.866					
ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																			
		Maximum Discharge		1 Hour		2 Hours		Maximum Volume for Selected Time		Interval		2 Days		8 Days					
		Date	Rate	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.				
1970		4-30	1.429	4-30	0.622	4-30	0.846	4-30	1.287	4-30	1.369	4-30	1.394	4-29	1.405	3-28	2.294		
MAXIMUMS FOR PERIOD OF RECORD																			
		4-18	6.990	7-15	3.314	7-15	3.737	7-15	3.963	10-2	4.519	7-4	5.185	10-1	5.679	9-29	7.627		
		1957		1951		1951		1951		1959		1951		1959		1959			

NOTES: Watershed conditions: All native grass pasture. For map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1964, USDA Misc. Pub. 1194, p. 37, 1-7 (Revised). Precipitation data obtained from R-1 recording rain gage. Precipitation and runoff records began July 1951. Station average precipitation data from R-3 recording rain gage record through 1964 combined with data from R-1 for 1965 through 1970. For long-time precipitation records, see National Weather Service records at Stillwater, Oklahoma.

1970 DAILY PRECIPITATION (inches)														STILLWATER, OKLAHOMA WATERSHED W-1											
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec													
1	0.0	0.0	0.0	0.76	0.0	0.18	0.0	0.05	0.0	0.0	0.13	0.0													
2	0.0	0.0	0.0	0.0	0.0	0.25	0.0	0.0	0.15	0.0	0.0	0.0													
3	0.0	0.0	0.0	0.0	0.0	0.71	0.0	0.0	0.51	0.0	0.0	0.0													
4	0.0	0.0	0.0	0.37	0.0	0.19	0.0	0.0	0.0	0.0	0.0	0.0													
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.29	0.0	0.0													
6	0.0	0.0	0.06	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0													
7	0.0	0.0	0.0	0.0	0.0	0.0	0.11	0.0	0.0	0.0	0.0	0.0													
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.03	0.0	1.36	0.0	0.0													
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.01	0.0	0.02	0.0	0.0													
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0													
11	0.0	0.0	0.0	0.0	0.0	0.36	0.0	0.0	0.0	0.0	0.0	0.0													
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0													
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.06	0.0	0.16	0.0													
14	0.0	0.0	0.0	0.0	0.42	0.0	0.0	0.0	0.10	0.0	0.01	0.0													
15	0.0	0.0	0.0	0.22	0.04	0.0	0.0	0.0	0.0	0.0	0.0	0.71													
16	0.0	0.0	0.54	0.60	0.0	0.0	0.0	0.0	1.86	0.0	0.0	0.0													
17	0.0	0.0	0.0	0.22	0.0	0.0	0.0	0.10	0.0	0.07	0.0	0.0													
18	0.06	0.0	0.0	0.69	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0													
19	0.04	0.0	0.32	0.0	0.0	0.03	0.0	0.0	0.0	0.0	0.0	0.0													
20	0.03	0.0	0.0	0.0	0.0	0.39	0.22	0.0	0.0	0.0	0.0	0.14													
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0													
22	0.0	0.25	0.0	0.0	0.0	0.0	0.0	0.0	2.98	0.0	0.0	0.0													
23	0.0	0.0	0.0	0.01	0.0	0.0	0.0	0.0	0.43	0.16	0.0	0.0													
24	0.0	0.0	0.0	0.0	0.0	0.68	0.0	0.0	0.0	0.01	0.0	0.0													
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0													
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0													
27	0.0	0.0	0.06	0.0	0.0	0.0	0.77	0.0	0.0	0.0	0.0	0.0													
28	0.0	0.0	0.93	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0													
29	0.0		0.0		0.55	0.0	0.0	0.0	0.0	0.0	0.0	0.0													
30	0.0		0.23	2.11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0													
31	0.0		0.47		0.11		0.0	0.0		0.0		0.0													
TOTAL	0.13	0.25	2.61	4.98	1.12	2.79	1.10	0.19	6.09	1.91	0.30	0.85													
STA AV	0.59	1.02	1.99	2.48	4.87	3.99	3.92	2.79	3.66	2.39	1.53	1.11													

NOTES: Amounts recorded at rain gage R-1 used for current monthly totals and for runoff events. STA AV based on 20 yr (1951-70) record period.

1970 MEAN DAILY DISCHARGE (cfs) STILLWATER, OKLAHOMA WATERSHED W-1												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.0	0.0	0.0	0.575	0.010	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	0.0	0.0	0.0	0.353	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3	0.0	0.0	0.0	0.027	0.0	0.033	0.0	0.0	0.0	0.0	0.0	0.0
4	0.0	0.0	0.0	0.066	0.0	0.004	0.0	0.0	0.0	0.0	0.0	0.0
5	0.0	0.0	0.0	0.046	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6	0.0	0.0	0.0	0.024	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7	0.0	0.0	0.0	0.006	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.048	0.0	0.0
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.027	0.0	0.0
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.006	0.0	0.0
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.003
16	0.0	0.0	0.003	0.008	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.017
17	0.0	0.0	0.043	0.183	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.001
18	0.0	0.0	0.056	0.480	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	0.0	0.0	0.286	0.040	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.061	0.111	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.040	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.024	0.0	0.0	0.0	0.0	0.0	0.031	0.0	0.0	0.0
23	0.0	0.0	0.015	0.0	0.0	0.0	0.0	0.0	0.037	0.0	0.0	0.0
24	0.0	0.0	0.004	0.0	0.0	0.0	0.0	0.0	0.001	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	0.0	0.0	0.033	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	0.0	0.0	0.314	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	0.0	0.0	0.222	0.976	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	0.0	0.0	0.295	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MEAN	0.0	0.0	0.0450	0.0832	0.0003	0.0002	0.0	0.0	0.0023	0.0026	0.0	0.0007
INCHES	0.0	0.0	1.989	3.557	0.014	0.010	0.0	0.0	0.099	0.115	0.0	0.030
STA AV	0.124	0.269	0.829	0.865	1.698	0.899	0.599	0.065	0.381	0.578	0.360	0.199

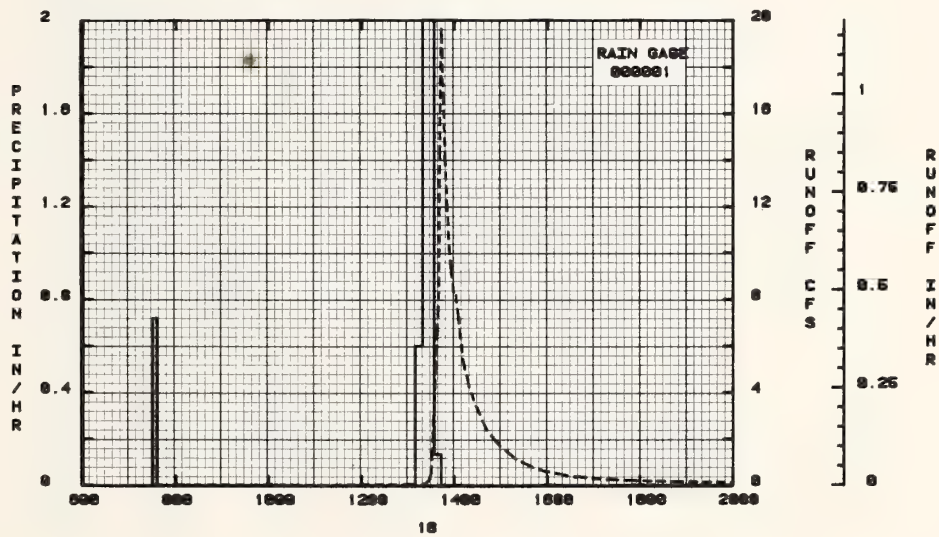
NOTES: To convert mean daily discharge in CFS to IN/DAY, multiply by 1.425249.

1970			SELECTED RUNOFF EVENT				STILLWATER, OKLAHOMA WATERSHED W-1					
ANTECEDENT CONDITIONS			RAINFALL				RUNOFF					
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.		
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)		
EVENT OF APRIL 18 - 20, 1970												
4-18	RG 000001		4-18	RG 000001			4-18					
	0.0	0.012		730	0.0	0.0		730	0.027	0.0		
				735	0.7200	0.06		1310	0.044	0.0119		
				1309	0.0018	0.07		1320	0.061	0.0124		
				1319	0.6000	0.17		1323	0.079	0.0126		
				1334	2.0000	0.67		1324	0.701	0.0127		
WATERSHED CONDITIONS:												
100% of area in native grass				1343	0.1333	0.69		1325	0.136	0.0128		
pasture; pasture in fair								1326	0.177	0.0130		
condition.								1327	0.221	0.0132		
								1328	0.281	0.0134		
								1329	0.431	0.0136		
								1330	0.522	0.0143		
								1331	1.303	0.0152		
								1332	1.970	0.0168		
								1333	2.711	0.0191		
								1334	3.553	0.0222		
								1335	4.243	0.0260		
								1336	5.035	0.0306		
								1337	5.725	0.0359		
								1338	6.618	0.0421		
								1339	7.409	0.0490		
								1340	8.638	0.0569		
								1341	10.593	0.0664		
								1342	17.303	0.0844		
								1343	19.619	0.1026		
								1344	18.689	0.1215		
								1346	16.411	0.1564		
								1348	14.081	0.1865		
								1351	11.913	0.2250		
								1353	10.268	0.2469		
								1355	9.504	0.2664		
								1357	8.967	0.2847		
								1359	8.320	0.3017		
								1402	8.184	0.3262		
								1405	7.291	0.3492		
								1408	6.332	0.3694		

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.059385.

1970 SELECTED RUNOFF EVENT			STILLWATER, OKLAHOMA WATERSHED W-1							
ANTECEDENT CONDITIONS			RAINFALL			RUNOFF				
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)
EVENT OF APRIL 18 - 20, 1970 (CONTINUED)										
							4-18	1412	5.304	0.3924
								1419	4.243	0.4255
								1429	3.334	0.4630
								1442	2.374	0.4997
								1459	1.701	0.5340
								1519	1.143	0.5622
								1541	0.761	0.5829
								1602	0.556	0.5966
								1626	0.406	0.6080
								1650	0.320	0.6166
								1722	0.241	0.6255
								1756	0.190	0.6328
								1846	0.150	0.6412
								2005	0.111	0.6514
								2150	0.089	0.6618
								2400	0.079	0.6726
							4-19	310	0.061	0.6858
								910	0.044	0.7045
								1630	0.027	0.7200
								2400	0.017	0.7298
							4-20	1200	0.017	0.7419
								1750	0.0	0.7448

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.059385.



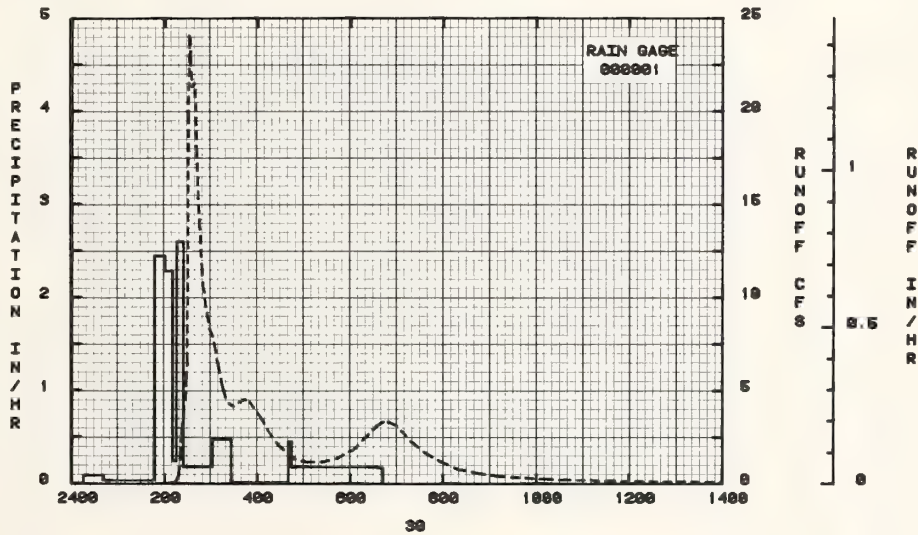
EVENT OF APRIL 18 - 20, 1970
STILLWATER, OKLAHOMA WATERSHED W-1

1970 SELECTED RUNOFF EVENT			STILLWATER, OKLAHOMA WATERSHED W-1							
ANTECEDENT CONDITIONS			RAINFALL			RUNOFF				
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)
EVENT OF			APRIL 30 -		MAY 1, 1970					
RG 000001			RG 000001							
4-30	0.0	0.0	4-30	15	0.0	0.0	4-30	207	0.0	0.0
				41	0.0923	0.04		208	0.037	0.0
				146	0.0277	0.07		211	0.054	0.0001
				200	2.4429	0.64		213	0.071	0.0002
				210	2.2800	1.02		214	0.111	0.0003
WATERSHED CONDITIONS: 100% of area in native grass pasture; pasture in fair condition.				215	0.2400	1.04		215	0.177	0.0004
				224	2.6000	1.43		216	0.261	0.0006
				302	0.1737	1.54		217	0.360	0.0009
				326	0.4750	1.73		218	0.431	0.0013
				440	0.0081	1.74		219	0.933	0.0020
				444	0.4500	1.77		220	1.463	0.0032
				635	0.1730	2.09		221	1.886	0.0049
				642	0.1714	2.11		222	2.492	0.0071
								223	3.216	0.0100
								225	4.126	0.0172
								227	4.883	0.0261
								228	5.591	0.0313
								229	6.618	0.0373
								230	19.637	0.0504
								231	24.055	0.0719
								232	23.939	0.0956
								233	22.462	0.1185
								235	21.286	0.1619
								238	21.511	0.2255
								239	20.377	0.2461
								241	17.561	0.2835
								243	15.302	0.3161
								245	13.656	0.3449
								248	11.542	0.3822
								249	10.713	0.3933
								251	10.268	0.4140
								253	9.505	0.4336
								255	9.039	0.4519
								258	8.292	0.4777
								302	7.914	0.5098
								306	7.039	0.5394
								309	6.332	0.5553
								314	5.304	0.5881
								319	4.631	0.6127
								324	4.245	0.6346
								329	4.126	0.6553
								341	4.496	0.7065
								345	4.496	0.7244
								350	4.378	0.7463
								404	3.553	0.8013
								419	2.492	0.8462
								427	2.071	0.8643
								434	1.802	0.8777
								449	1.303	0.9007
								504	1.143	0.9189
								524	1.143	0.9415
								543	1.384	0.9653
								603	1.802	0.9968
								617	2.374	1.0257
								634	3.098	1.0718
								643	3.334	1.1004
								649	3.334	1.1202
								700	3.098	1.1552
								721	2.172	1.2099
								738	1.623	1.2418
								758	1.143	1.2692
								820	0.761	1.2895
								845	0.556	1.3062
								910	0.406	1.3181
								938	0.320	1.3282
								1012	0.241	1.3376
								1044	0.190	1.3444
								1121	0.163	1.3509
								1131	0.150	1.3524
								1142	0.136	1.3540
								1254	0.101	1.3624
								1340	0.079	1.3665
								1450	0.061	1.3714
								1630	0.044	1.3766
								2030	0.027	1.3850

NOTES: To convert runoff in CPS to IN/HR, multiply by 0.059385.

1970 SELECTED RUNOFF EVENT			STILLWATER, OKLAHOMA WATERSHED W-1							
ANTECEDENT CONDITIONS			RAINFALL				RUNOFF			
Date Mo-Day	Rainfall (inches)	Runoff (inches)	Date Mo-Day	Time of Day	Intensity (in/hr)	Acc. (inches)	Date Mo-Day	Time of Day	Rate (cfs)	Acc. (inches)
EVENT OF APRIL 30 - MAY 1, 1970 (CONTINUED)										
							4-30	2400	0.027	1.3906
							5- 1	630	0.017	1.3991
								1720	0.0	1.4046

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.059385.



EVENT OF APRIL 30 - MAY 1, 1970
STILLWATER, OKLAHOMA WATERSHED W-1

STILLWATER, OKLAHOMA WATERSHED W-3

LOCATION: Noble Co., Okla.; 15 mi. N. of Stillwater; Black Bear Creek, Arkansas River.

AREA: 92.00 acres

MONTHLY PRECIPITATION AND RUNOFF (inches)														STILLWATER, OKLAHOMA WATERSHED W-3															
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual															
1970	P	0.21	0.20	2.94	4.50	1.12	2.71	1.00	0.17	5.49	1.83	0.28	0.50	21.35															
	Q	0.0	0.0	1.152	2.930	0.055	0.0	0.0	0.0	0.009	0.026	0.0	0.0	4.172															
STA AV	P	0.59	1.01	2.01	2.42	4.81	3.93	3.88	2.79	3.55	2.36	1.50	1.11	29.97															
	Q	0.042	0.157	0.619	0.705	1.466	0.762	0.508	0.079	0.317	0.518	0.188	0.084	5.443															
ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																													
		Maximum Discharge		1 Hour		2 Hours		Maximum Volume for Selected Time Interval										1 Day		2 Days		8 Days							
		Date	Rate	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.		
1970		4-30	0.510	4-30	0.402	4-30	0.616	4-30	1.007	4-30	1.111	4-30	1.137	4-30	1.157	3-29	1.671												
MAXIMUMS FOR PERIOD OF RECORD																													
		7-15	4.739	7-15	2.896	7-15	3.486	7-15	3.796	10- 1	4.957	10- 1	5.185	10- 1	6.083	9-30	8.143												
		1951		1951		1951		1951		1959		1959		1959		1959													

NOTES: Watershed conditions: All native grass cover. For map of watershed, see Selected Runoff Events for Small Agricultural Watersheds in the United States, USDA, ARS, Jan. 1960, p. 37.2-6. Precipitation data obtained from R-3 recording rain gage. Precipitation and runoff records began July 1951. STA AV based on 20 yr (1951-70) record period. For long-time precipitation records, see National Weather Service records at Stillwater, Oklahoma.

1970 DAILY PRECIPITATION (inches)													STILLWATER, OKLAHOMA WATERSHED W-3												
	Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec												
	1	0.0	0.0	0.0	0.70	0.0	0.19	0.0	0.03	0.0	0.0	0.12	0.0												
	2	0.0	0.0	0.0	0.0	0.0	0.24	0.0	0.0	0.14	0.0	0.0	0.0												
	3	0.0	0.0	0.0	0.0	0.0	0.67	0.0	0.0	0.48	0.0	0.0	0.0												
	4	0.0	0.0	0.0	0.32	0.0	0.12	0.0	0.0	0.0	0.0	0.0	0.0												
	5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.30	0.0	0.0												
	6	0.0	0.0	0.06	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0												
	7	0.0	0.0	0.0	0.0	0.0	0.0	0.10	0.0	0.0	0.02	0.0	0.0												
	8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.02	0.0	1.23	0.0	0.0												
	9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.02	0.0	0.05	0.0	0.0												
	10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0												
	11	0.0	0.0	0.0	0.0	0.0	0.36	0.0	0.0	0.0	0.0	0.0	0.0												
	12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0												
	13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.06	0.0	0.16	0.0												
	14	0.0	0.0	0.0	0.0	0.44	0.0	0.0	0.0	0.09	0.0	0.0	0.0												
	15	0.0	0.0	0.0	0.22	0.07	0.0	0.0	0.0	0.0	0.0	0.0	0.0												
	16	0.0	0.0	0.77	0.46	0.0	0.0	0.0	0.0	1.82	0.0	0.0	0.0												
	17	0.0	0.0	0.0	0.23	0.0	0.0	0.0	0.10	0.0	0.06	0.0	0.0												
	18	0.11	0.0	0.0	0.67	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0												
	19	0.05	0.0	0.36	0.0	0.0	0.03	0.0	0.0	0.0	0.0	0.0	0.0												
	20	0.05	0.0	0.0	0.0	0.0	0.36	0.20	0.0	0.0	0.0	0.0	0.0												
	21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.02												
	22	0.0	0.20	0.0	0.0	0.0	0.0	0.0	0.0	2.52	0.0	0.0	0.0												
	23	0.0	0.0	0.0	0.01	0.0	0.0	0.0	0.0	0.38	0.17	0.0	0.0												
	24	0.0	0.0	0.0	0.0	0.0	0.74	0.0	0.0	0.0	0.0	0.0	0.0												
	25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0												
	26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0												
	27	0.0	0.0	0.05	0.0	0.0	0.0	0.70	0.0	0.0	0.0	0.0	0.0												
	28	0.0	0.0	1.06	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0												
	29	0.0		0.0	0.0	0.51	0.0	0.0	0.0	0.0	0.0	0.0	0.0												
	30	0.0		0.24	1.89	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0												
	31	0.0		0.40		0.10		0.0	0.0	0.0	0.0	0.0	0.0												
TOTAL		0.21	0.20	2.94	4.50	1.12	2.71	1.00	0.17	5.49	1.83	0.28	0.50												
STA AV		0.59	1.01	2.01	2.42	4.81	3.93	3.88	2.79	3.55	2.36	1.50	1.11												

NOTES: Amounts recorded at rain gage R-3 used for current monthly totals and for runoff events. STA AV based on 20 yr (1951-70) record period.

1970 MEAN DAILY DISCHARGE (cfs) STILLWATER, OKLAHOMA WATERSHED W-3												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.0	0.0	0.0	2.522	0.087	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	0.0	0.0	0.0	0.207	0.063	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3	0.0	0.0	0.0	0.125	0.042	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4	0.0	0.0	0.0	0.201	0.020	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	0.0	0.0	0.0	0.187	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6	0.0	0.0	0.0	0.120	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7	0.0	0.0	0.0	0.095	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8	0.0	0.0	0.0	0.076	0.0	0.0	0.0	0.0	0.0	0.059	0.0	0.0
9	0.0	0.0	0.0	0.053	0.0	0.0	0.0	0.0	0.0	0.042	0.0	0.0
10	0.0	0.0	0.0	0.037	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11	0.0	0.0	0.0	0.019	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0	0.017	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.0	0.0	0.083	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	0.0	0.0	0.045	2.249	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	0.0	0.0	0.552	0.153	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.190	0.065	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.109	0.051	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.076	0.037	0.0	0.0	0.0	0.0	0.006	0.0	0.0	0.0
23	0.0	0.0	0.065	0.023	0.0	0.0	0.0	0.0	0.026	0.0	0.0	0.0
24	0.0	0.0	0.058	0.014	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.051	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	0.0	0.0	0.011	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	0.0	0.0	0.062	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	0.0	0.0	1.059	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	0.0	0.0	1.002	4.392	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	0.0	0.0	1.172	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MEAN	0.0	0.0	0.1437	0.3776	0.0068	0.0	0.0	0.0	0.0011	0.0033	0.0	0.0
INCHES	0.0	0.0	1.152	2.930	0.055	0.0	0.0	0.0	0.009	0.026	0.0	0.0
STA AV	0.042	0.157	0.619	0.705	1.466	0.762	0.508	0.079	0.317	0.518	0.188	0.084

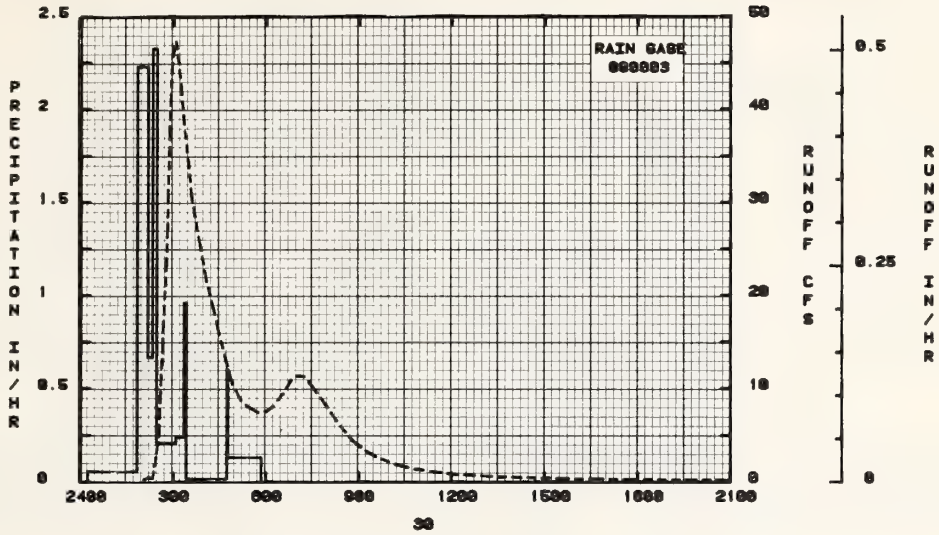
NOTES: To convert mean daily discharge in CFS to IN/DAY, multiply by 0.258714.

1970 SELECTED RUNOFF EVENT STILLWATER, OKLAHOMA WATERSHED W-3											
ANTECEDENT CONDITIONS			RAINFALL			RUNOFF					
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.	
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)	
EVENT OF APRIL 30 - MAY 4, 1970											
RG 000003											
4-30	0.0	0.0	4-30	14	0.0	0.0	4-30	202	0.0	0.0	
				149	0.0568	0.09		203	0.210	0.0	
				210	2.2286	0.87		204	0.282	0.0	
				219	0.6667	0.97		206	0.283	0.0001	
				227	2.3250	1.28		210	0.373	0.0003	
WATERSHED CONDITIONS:											
100% of area in native grass;				305	0.2053	1.41		211	0.475	0.0004	
32% in hay meadow in good				320	0.2400	1.47		213	0.407	0.0006	
condition, 46% in pasture in				325	0.9600	1.55		215	0.356	0.0007	
fair condition, and 22% in				444	0.0152	1.57		220	0.440	0.0011	
pasture in poor condition.				446	0.6000	1.59		222	1.099	0.0014	
				551	0.1292	1.73		223	1.703	0.0017	
								224	1.895	0.0020	
								225	2.228	0.0024	
								226	2.618	0.0028	
								227	3.087	0.0033	
								228	3.539	0.0039	
								229	3.937	0.0046	
								230	4.232	0.0053	
								232	4.851	0.0069	
								233	6.094	0.0079	
								234	7.781	0.0092	
								235	9.654	0.0108	
								236	11.461	0.0127	
								237	12.537	0.0148	
								238	13.159	0.0171	
								239	14.585	0.0196	
								240	16.488	0.0224	
								242	18.887	0.0288	
								244	21.136	0.0360	
								246	23.258	0.0440	
								248	27.679	0.0531	
								249	30.608	0.0584	
								251	35.235	0.0702	
								252	38.162	0.0768	
								254	40.878	0.0910	

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.01078.

1970 SELECTED RUNOFF EVENT			STILLWATER, OKLAHOMA WATERSHED W-3							
ANTECEDENT CONDITIONS			RAINFALL				RUNOFF			
Date Mo-Day	Rainfall (inches)	Runoff (inches)	Date Mo-Day	Time of Day	Intensity (in/hr)	Acc. (inches)	Date Mo-Day	Time of Day	Rate (cfs)	Acc. (inches)
EVENT OF APRIL 30 - MAY 4, 1970 (CONTINUED)										
							4-30	256	44.236	0.1062
								258	45.826	0.1224
								301	46.780	0.1474
								304	47.277	0.1728
								308	45.673	0.2062
								314	42.341	0.2536
								320	38.382	0.2972
								328	34.475	0.3495
								334	30.875	0.3848
								341	28.440	0.4220
								353	24.835	0.4795
								404	21.523	0.5253
								417	18.674	0.5722
								429	15.807	0.6094
								442	13.140	0.6432
								455	10.487	0.6708
								511	8.707	0.6984
								528	7.696	0.7238
								545	7.436	0.7472
								600	7.526	0.7674
								614	8.141	0.7871
								633	9.436	0.8171
								649	10.897	0.8463
								700	11.362	0.8683
								714	11.268	0.8967
								724	10.642	0.9164
								738	9.579	0.9418
								759	7.989	0.9749
								817	6.510	0.9983
								834	5.341	1.0164
								848	4.407	1.0287
								904	3.715	1.0404
								917	3.161	1.0484
								933	2.701	1.0568
								958	2.131	1.0677
								1023	1.685	1.0763
								1052	1.325	1.0841
								1126	1.045	1.0913
								1159	0.850	1.0969
								1231	0.727	1.1014
								1318	0.584	1.1069
								1401	0.479	1.1110
								1456	0.381	1.1152
								1547	0.321	1.1184
								1654	0.260	1.1219
								1800	0.225	1.1248
								1940	0.191	1.1265
								2210	0.155	1.1332
								2400	0.137	1.1361
							5- 1	530	0.101	1.1432
								840	0.092	1.1465
								1310	0.073	1.1505
								2400	0.065	1.1586
							5- 2	1200	0.065	1.1670
								2400	0.056	1.1748
							5- 3	1200	0.037	1.1808
								2400	0.037	1.1856
							5- 4	1330	0.019	1.1897
								2400	0.0	1.1908

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.01078.



EVENT OF APRIL 30 - MAY 4, 1970
STILLWATER, OKLAHOMA WATERSHED #3

STILLWATER, OKLAHOMA WATERSHED W-4

LOCATION: Noble Co., Okla.; 15 mi. N. of Stillwater; Black Bear Creek, Arkansas River.

AREA: 206.00 acres

MONTHLY PRECIPITATION AND RUNOFF (inches)														STILLWATER, OKLAHOMA WATERSHED W-4															
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual															
1970	P	0.09	0.20	2.48	4.20	0.80	2.82	1.13	0.19	5.35	1.91	0.22	0.51	20.30															
	Q	0.0	0.0	0.334	1.190	0.014	0.0	0.0	0.0	0.034	0.023	0.0	0.0	1.595															
STA AV	P	0.52	0.97	1.91	2.31	4.65	3.81	3.76	2.65	3.58	2.41	1.41	1.05	29.03															
	Q	0.058	0.083	0.346	0.405	1.144	0.684	0.476	0.064	0.325	0.464	0.111	0.066	4.226															
ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																													
		Maximum Discharge		1 Hour		2 Hours		Maximum Volume for Selected Time Interval		6 Hours		12 Hours		1 Day		2 Days		8 Days											
		Date	Rate	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.										
1970		4-30	0.292	4-30	0.213	4-30	0.305	4-30	0.459	4-30	0.499	4-30	0.512	4-30	0.517	3-28	0.642												
MAXIMUMS FOR PERIOD OF RECORD																													
		4-18	2.390	4-18	1.473	4-18	1.936	10-2	2.628	10-2	4.493	10-2	4.711	10-1	5.238	9-30	6.877												
		1957		1957		1957		1959		1959		1959		1959		1959													

NOTES: Watershed conditions: All native grass cover. For map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1964, USDA Misc. Pub. 1194, p. 37.3-6 (Revised). Precipitation and runoff records began July 1951. STA AV based on 20 yr (1951-70) record period. Station average precipitation data from R-4 recording rain gage record through 1964 combined with R-2 for 1965 through 1970. For long-time precipitation records, see National Weather Service records at Stillwater, Oklahoma.

1970		DAILY PRECIPITATION (inches)					STILLWATER, OKLAHOMA WATERSHED W-4							
	Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
	1	0.0	0.0	0.0	0.67	0.0	0.16	0.0	3.06	0.0	0.0	0.10	0.0	
	2	0.0	0.0	0.0	0.0	0.0	0.26	0.0	0.0	0.10	0.0	0.0	0.0	
	3	0.0	0.0	0.0	0.0	0.0	0.71	0.0	0.0	0.54	0.0	0.0	0.0	
	4	0.0	0.0	0.0	0.27	0.0	0.14	0.0	0.0	0.0	0.0	0.0	0.0	
	5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.31	0.0	0.0	
	6	0.0	0.0	0.06	0.0	0.0	0.0	0.0	0.0	0.0	0.01	0.0	0.0	
	7	0.0	0.0	0.0	0.0	0.0	0.0	0.05	0.0	0.0	0.0	0.0	0.0	
	8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.03	0.0	1.26	0.0	0.0	
	9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.01	0.0	0.05	0.0	0.0	
	10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	11	0.0	0.0	0.0	0.0	0.0	0.37	0.0	0.0	0.0	0.0	0.0	0.0	
	12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.08	0.0	0.10	0.0	
	14	0.0	0.0	0.0	0.0	0.15	0.0	0.0	0.0	0.16	0.0	0.02	0.0	
	15	0.0	0.0	0.0	0.24	0.08	0.0	0.0	0.0	0.0	0.0	0.0	0.75	
	16	0.0	0.0	0.54	0.54	0.0	0.0	0.0	0.0	1.56	0.0	0.0	0.0	
	17	0.0	0.0	0.0	0.25	0.0	0.0	0.0	0.09	0.0	0.08	0.0	0.0	
	18	3.06	0.0	0.0	0.49	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	19	0.02	0.0	0.29	0.0	0.0	0.10	0.0	0.0	0.0	0.0	0.0	0.0	
	20	0.01	0.0	0.0	0.0	0.0	0.47	0.19	0.0	0.0	0.0	0.0	0.16	
	21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	22	0.0	0.20	0.0	0.0	0.0	0.0	0.0	0.0	2.59	0.0	0.0	0.0	
	23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.32	0.19	0.0	0.0	
	24	0.0	0.0	0.0	0.0	0.0	0.61	0.0	0.0	0.0	0.01	0.0	0.0	
	25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	27	0.0	0.0	0.06	0.0	0.0	0.0	0.89	0.0	0.0	0.0	0.0	0.0	
	28	0.0	0.0	0.93	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	29	0.0	0.0	0.0	0.0	0.52	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	30	0.0	0.0	0.20	1.74	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	31	0.0	0.0	0.40	0.0	0.05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
TOTAL		0.09	0.20	2.48	4.20	0.80	2.82	1.13	0.19	5.35	1.91	0.22	0.91	
STA AV		0.52	0.97	1.91	2.31	4.65	3.81	3.76	2.65	3.58	2.41	1.41	1.05	

NOTES: Amounts recorded at rain gage R-2 used for current monthly totals and for runoff events. STA AV based on 20 yr (1951-70) record period.

1970 MEAN DAILY DISCHARGE (cfs) STILLWATER, OKLAHOMA WATERSHED W-4												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.0	0.0	0.0	2.926	0.057	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	0.0	0.0	0.0	0.110	0.037	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3	0.0	0.0	0.0	0.037	0.021	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4	0.0	0.0	0.0	0.154	0.008	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	0.0	0.0	0.0	0.064	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6	0.0	0.0	0.0	0.037	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7	0.0	0.0	0.0	0.018	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.192	0.0	0.0
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.008	0.0	0.0
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0	0.018	0.0	0.0	0.0	0.0	0.029	0.0	0.0	0.0
17	0.0	0.0	0.008	0.672	0.0	0.0	0.0	0.0	0.013	0.0	0.0	0.0
18	0.0	0.0	0.017	1.660	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	0.0	0.0	0.488	0.120	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.059	0.033	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.038	0.021	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.003	0.004	0.0	0.0	0.0	0.0	0.172	0.0	0.0	0.0
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.080	0.0	0.0	0.0
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	0.0	0.0	0.027	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	0.0	0.0	0.754	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	0.0	0.0	0.530	4.419	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	0.0	0.0	0.968	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MEAN	0.0	0.0	0.0933	0.3432	0.0040	0.0	0.0	0.0	0.0098	0.0064	0.0	0.0
INCHES	0.0	0.0	0.334	1.190	0.014	0.0	0.0	0.0	0.034	0.023	0.0	0.0
STA AV	0.058	0.083	0.346	0.405	1.144	0.684	0.476	0.064	0.325	0.464	0.111	0.066

NOTES: To convert mean daily discharge in CPS to IN/DAY, multiply by 0.115542.

RIESEL (WACO), TEXAS WATERSHED C

LOCATION: McLennan Co., Texas; 14 mi. ESE of Waco; Brazos River Basin.

AREA: 579.00 acres

MONTHLY PRECIPITATION AND RUNOFF (inches)														RIESEL (WACO), TEXAS WATERSHED C	
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual	
1970	P	0.97	4.66	4.39	2.53	2.86	0.07	0.26	0.90	6.30	2.92	0.27	0.82	26.95	
	Q	0.112	1.403	2.350	0.335	0.111	0.002	0.0	0.0	0.0	0.025	0.0	0.9	4.338	
STA AV	P	1.92	2.84	2.25	3.87	4.01	3.47	1.47	2.54	3.21	2.88	3.04	2.29	33.79	
	Q	0.441	0.658	0.649	1.019	0.931	0.633	0.171	0.185	0.360	0.302	0.484	0.519	6.353	
ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS															
		Maximum Discharge		1 Hour		2 Hours		Maximum Volume for Selected Time Interval		6 Hours		12 Hours		1 Day	
		Date	Date	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	2 Days	8 Days
		Date	Date	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.
1970		3- 6	0.297	3- 6	0.189	3- 6	0.336	2-24	0.604	2-24	0.730	3- 6	1.377	3- 6	1.476
															2-28
															2.256
MAXIMUMS FOR PERIOD OF RECORD															
		3-29	1.580	3-29	1.500	3-29	2.520	3-29	3.550	3-29	3.800	3-29	4.480	9- 7	4.780
		1965		1965		1965		1965		1965		1965		1942	1957

NOTES: Watershed conditions: 85% pasture; 7% row grain sorghum; 2% corn; 2% gravel and paved roads; 4% other. Approximately 90% of other is Johnsongrass and weeds in conservation reserve, but neither tilled nor grazed. For map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1956-59, USDA Misc. Pub. 945, p. 42-46. Precipitation and runoff records began Feb. 1938; station not in operation July 1943 to Mar. 1, 1949; part-year amounts not included in averages. Precipitation data from Thiessen weighted method using rain gages 5, 14, and 20. For long-time precipitation records, see National Weather Service records at Waco, Texas.

1970 DAILY AIR TEMPERATURE (degrees F)														RIESEL (WACO), TEXAS WATERSHED C	
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec			
	max min	max min	max min	max min	max min	max min	max min	max min	max min	max min	max min	max min	max min		
1	47 26	52 37	70 58	74 57	75 52	81 64	95 75	98 75	94 69	81 61	74 51	79 63			
2	54 32	58 44	66 60	73 35	66 50	79 56	95 74	99 75	78 70	82 62	64 38	76 63			
3	43 28	47 23	69 56	62 40	69 49	78 53	96 75	99 77	90 72	88 67	58 36	78 64			
4	48 20	43 30	85 50	69 46	74 53	78 55	99 73	98 76	85 76	87 68	56 34	76 51			
5	48 30	62 45	65 45	72 40	78 58	77 57	102 71	98 76	95 73	86 67	55 34	75 54			
6	47 22	63 46	69 49	65 42	81 54	81 58	94 67	96 76	94 75	80 66	65 38	77 49			
7	31 18	60 52	60 49	78 50	80 52	86 60	95 73	100 78	95 73	83 70	71 45	62 40			
8	43 20	58 40	52 43	78 53	80 60	92 66	97 74	100 78	94 73	88 72	78 53	65 44			
9	41 18	62 37	65 45	77 60	83 61	88 65	98 78	100 77	94 71	78 43	78 50	73 54			
10	36 20	55 32	70 45	71 56	83 68	87 63	98 76	99 75	94 77	64 43	69 41	78 59			
11	48 36	62 34	53 40	70 55	86 71	87 65	98 75	102 76	93 70	70 46	70 45	76 37			
12	64 36	72 33	44 34	74 60	86 72	89 75	98 76	97 73	89 71	68 57	74 37	46 28			
13	43 32	56 35	41 33	83 53	85 68	92 78	84 71	97 74	92 73	69 51	62 43	53 30			
14	42 34	71 44	54 36	71 54	87 67	93 78	93 72	99 75	87 71	76 53	51 43	57 37			
15	51 34	70 37	62 41	75 59	85 63	92 73	94 73	95 72	92 70	74 50	48 34	56 42			
16	55 36	41 31	70 44	75 65	70 49	92 70	92 71	95 73	92 72	95 47	48 29	71 44			
17	59 37	56 34	65 38	77 69	78 55	93 73	91 73	99 76	78 72	59 49	65 35	60 34			
18	64 28	69 48	52 39	79 70	73 57	93 70	94 73	100 76	87 71	60 48	75 41	71 39			
19	28 23	80 34	61 43	75 56	84 63	92 72	98 74	99 77	89 73	63 48	72 50	78 60			
20	41 25	53 39	53 40	73 54	87 65	93 71	98 73	98 77	91 72	69 50	78 41	66 40			
21	36 28	50 41	46 35	83 55	86 62	93 73	98 66	96 77	90 73	73 53	68 44	58 41			
22	39 32	60 47	45 34	81 61	87 63	95 69	78 60	96 77	87 73	75 58	77 48	71 58			
23	44 34	55 48	62 40	83 70	84 63	94 72	84 62	98 77	87 61	78 63	72 33	73 52			
24	47 37	55 48	72 49	80 71	82 67	89 73	99 68	92 74	73 59	73 55	46 22	55 25			
25	68 44	55 48	76 55	77 68	78 65	92 70	89 68	92 67	85 62	89 55	46 29	57 26			
26	77 42	54 33	70 39	81 63	85 67	94 73	93 69	92 66	85 59	79 60	69 38	53 27			
27	70 43	57 37	57 38	83 72	86 65	94 74	93 73	93 64	62 55	84 71	77 62	56 30			
28	73 59	60 47	66 47	83 73	84 62	97 75	94 74	92 67	65 55	76 42	77 56	59 40			
29	78 45		59 41	82 72	82 66	93 73	94 71	94 67	73 55	61 43	73 58	76 54			
30	56 27		59 42	82 71	83 69	94 72	96 74	92 69	78 58	68 43	74 60	61 45			
31	56 31		59 50		89 66		97 74	91 71		72 43		66 37			
AV.	51 32	58 39	62 44	76 58	81 61	89 68	94 72	97 74	86 68	76 55	66 42	66 44			
MEAN	41.2	49.0	52.7	67.3	71.3	78.8	83.1	85.2	77.4	65.4	54.3	55.3			
STA AV	57 37	62 40	69 47	77 56	83 63	89 70	94 72	94 72	88 66	81 57	68 46	61 39			

NOTES: Temperature data taken daily with maximum and minimum thermometers. Readings were taken at 0800 of the day shown. STA AV based on 32 yr (1939-1970) period.

1970 DAILY PRECIPITATION (inches)													RIESEL (WACO), TEXAS WATERSHED C	
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
1	0.0	1.18	0.33	0.05E	0.0	0.07E	0.17E	0.0	0.83	0.0	0.01E	0.0		
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.41	0.0	0.0	0.0		
3	0.06E	0.0	0.20	0.0	0.0	0.0	0.0	0.12E	0.0	0.0	0.0	0.0		
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
5	0.77	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
6	0.0	0.40	1.14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
7	0.0	0.0	0.88	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.63	0.0	0.0		
9	0.0	0.0	0.0	1.59	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
10	0.03E	0.0	0.0	0.05	0.0	0.0	0.0	0.0	0.34	0.0	0.0	0.0		
11	0.0	0.0	0.40	0.0	0.0	0.0	0.0	0.01E	0.0	0.53	0.0	0.0		
12	0.0	0.0	0.0	0.0	0.0 E	0.0	0.0	0.0	0.24	0.05	0.0	0.0		
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.12	0.0	0.26	0.0		
14	0.03E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
15	0.0	0.42	0.0	0.0	0.19E	0.0	0.0	0.0	0.05E	0.0	0.0	0.08E		
16	0.0	0.0	0.36	0.03E	0.0	0.0	0.0	0.0	2.69	0.0	0.0	0.0		
17	0.0	0.0	0.16	0.0	0.0	0.0	0.0	0.0	0.28	0.0	0.0	0.0		
18	0.08E	0.0	0.0	0.18	0.0	0.0	0.0	0.0	0.0	0.12	0.0	0.0		
19	0.0	0.0	0.05E	0.10	0.0	0.0	0.0	0.0	0.0	0.05	0.0	0.06E		
20	0.0	0.0	0.32	0.0	0.0	0.0	0.0	0.0	0.0 E	0.0	0.0	0.13E		
21	0.0	0.0	0.18	0.0	0.0	0.0	0.09E	0.0	0.06E	0.0	0.0	0.02E		
22	0.0	0.0	0.0	0.0	0.19	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
23	0.0	0.30	0.0	0.0	0.00E	0.0	0.0	0.07E	0.28	1.54	0.0	0.0		
24	0.0	1.61	0.0	0.0	0.03E	0.0	0.01E	0.0	0.0	0.0	0.0	0.0		
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.66	0.0	0.0	0.0		
26	0.0	0.0	0.0	0.0	0.32	0.0	0.0	0.0	0.35	0.0	0.0	0.0		
27	0.0	0.48	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
28	0.0	0.26	0.03E	0.0	0.92	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.67	0.0	0.0	0.0	0.0		
30	0.0	0.0	0.0	0.53	1.29	0.0	0.0	0.02	0.0	0.0	0.0	0.54		
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
TOTAL	0.97	4.66	4.39	2.53	2.86	0.07	0.26	0.90	6.30	2.92	0.27	0.82		
STA AV	1.92	2.84	2.25	3.87	4.01	3.47	1.47	2.54	3.21	2.88	3.04	2.29		

NOTES: Precipitation values are Thiessen weighted average of rain gages 5, 14, and 20. Records began Feb. 1938; station not in operation July 1943 to Mar. 1, 1949; part-year amounts not included in averages. STA AV based on 25 yr period. Estimate codes may indicate that non-significant event totals are included.

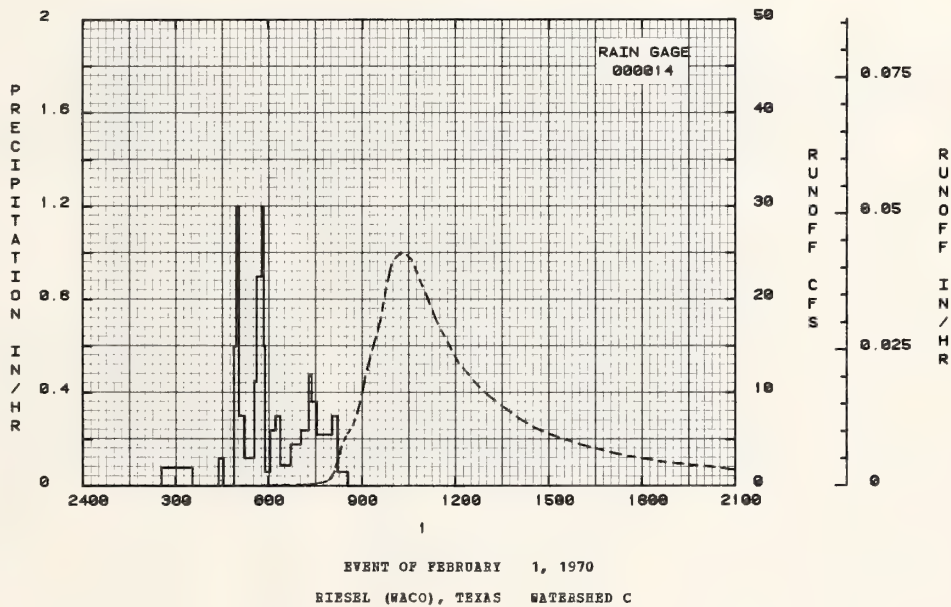
1970 MEAN DAILY DISCHARGE (cfs)													RIESEL (WACO), TEXAS WATERSHED C	
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
1	0.018	4.741	3.613	0.001	0.001	0.049	0.0	0.0	0.0	0.0	0.0	0.0		
2	0.009	0.422	5.139	0.0 T	0.005	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
3	0.006	0.052	4.219	0.001	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
4	0.003	0.018	0.743	0.001	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
5	1.976	0.009	0.169	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
6	0.533	0.179	6.242	0.0 T	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
7	0.071	0.194	28.100	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
8	0.025	0.066	1.796	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
9	0.009	0.022	0.303	1.735	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
10	0.008	0.008	0.097	5.981	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
11	0.007	0.005	0.263	0.293	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
12	0.004	0.002	0.204	0.085	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
13	0.003	0.032	0.373	0.023	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
14	0.003	0.002	0.035	0.004	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
15	0.003	0.006	0.320	0.002	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
16	0.003	0.019	0.019	0.002	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
17	0.003	0.008	1.852	0.002	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
18	0.002	0.004	0.273	0.002	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
19	0.003	0.001	0.144	0.002	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
20	0.002	0.031	0.078	0.001	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
21	0.002	0.001	3.068	0.0 T	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
22	0.002	0.001	0.470	0.0 T	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
23	0.002	0.003	0.139	0.001	0.0	0.0	0.0	0.0	0.0	0.556	0.0	0.0		
24	0.002	18.500	0.061	0.001	0.0	0.0	0.0	0.0	0.0	0.059	0.0	0.0		
25	0.003	2.767	0.027	0.001	0.0	0.0	0.0	0.0	0.0	0.002	0.0	0.0		
26	0.002	0.244	0.008	0.001	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
27	0.004	0.120	0.003	0.0 T	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
28	0.004	6.736	0.002	0.0 T	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
29	0.004	0.002	0.002	0.0 T	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
30	0.002	0.002	0.002	1.414	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
31	0.001	0.001	0.001	1.285	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
MEAN	0.0878	1.2190	1.8440	0.2714	0.0871	0.0018	0.0	0.0	0.0	0.0199	0.0	0.0		
INCHES	0.112	1.403	2.350	0.335	0.111	0.002	0.0	0.0	0.0	0.025	0.0	0.0		
STA AV	0.441	0.658	0.649	1.019	0.931	0.633	0.171	0.185	0.360	0.302	0.484	0.519		

NOTES: To convert mean daily discharge in CFS to IN/DAY, multiply by 0.041108. Records began Feb. 1938; station not in operation July 1943 to Mar. 1, 1949; part-year amounts not included in averages. STA AV based on 25 yr period.

1970 SELECTED RUNOFF EVENT			RIESEL (WACO), TEXAS			WATERSHED C				
ANTECEDENT CONDITIONS			RAINFALL			RUNOFF				
Date	Rainfall	Runoff	Date	Time	Intensity	Date	Time	Rate		
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	Acc. (inches)
EVENT OF FEBRUARY 1, 1970										
RG 000014										
2- 1	0.0	0.0	2- 1	233	0.0	0.0	2- 1	503	0.010	0.0
				303	0.0800	0.04		505	0.010	0.0
				333	0.0800	0.08		507	0.010	0.0
				423	0.0	0.08		509	0.020	0.0
				433	0.1200	0.10		511	0.030	0.0
WATERSHED CONDITIONS:										
85% pasture, dormant, all										
classes; 9% tilled, but not										
planted; 2% gravel and paved										
roads; 4% other. Approx. 90%										
of other is Johnsongrass and										
weeds in conservation reserve,										
neither tilled nor grazed.										
				453	0.0	0.10		513	0.040	0.0
				458	0.6000	0.15		517	0.050	0.0
				503	1.2000	0.25		537	0.050	0.0
				513	0.3000	0.30		547	0.060	0.0
				523	0.1200	0.32		552	0.060	0.0
				528	0.1200	0.33		557	0.080	0.0
				533	0.1200	0.34		602	0.090	0.0
				537	0.4500	0.37		607	0.100	0.0
				541	0.9000	0.43		617	0.110	0.0
				547	0.9000	0.52		627	0.110	0.0
				551	1.2000	0.60		657	0.110	0.0001
				553	0.6000	0.62		702	0.120	0.0001
				603	0.0600	0.63		707	0.140	0.0001
				613	0.2400	0.67		712	0.170	0.0001
				623	0.3000	0.72		717	0.190	0.0001
				643	0.0900	0.75		722	0.210	0.0001
				703	0.1800	0.81		727	0.240	0.0001
				718	0.2400	0.87		732	0.280	0.0001
				723	0.4800	0.91		737	0.320	0.0001
				733	0.3600	0.97		742	0.360	0.0001
				803	0.2200	1.08		747	0.410	0.0002
				813	0.3000	1.13		752	0.520	0.0003
				833	0.0600	1.15		757	0.680	0.0004
				933	0.0	1.15		759	0.840	0.0004
								801	0.960	0.0005
								803	1.150	0.0006
								805	1.320	0.0007
								807	1.570	0.0008
								809	2.010	0.0009
								811	2.360	0.0010
								813	2.670	0.0011
								815	3.050	0.0013
								817	3.480	0.0015
								821	4.250	0.0019
								825	4.820	0.0024
								829	5.290	0.0030
								833	5.700	0.0036
								837	6.010	0.0043
								842	6.540	0.0052
								847	7.130	0.0062
								852	8.050	0.0073
								857	9.090	0.0085
								902	10.370	0.0099
								907	11.770	0.0115
								912	12.900	0.0133
								917	13.910	0.0152
								922	14.980	0.0173
								927	15.900	0.0195
								932	16.910	0.0218
								937	18.100	0.0243
								942	19.640	0.0270
								947	21.220	0.0299
								952	22.360	0.0330
								957	23.770	0.0363
								1007	24.610	0.0432
								1017	25.010	0.0503
								1027	24.730	0.0574
								1037	24.220	0.0644
								1047	22.790	0.0711
								1107	20.170	0.0834
								1127	17.390	0.0941
								1147	15.290	0.1034
								1237	13.210	0.1115
								1227	11.870	0.1187
								1247	10.550	0.1251
								1337	9.580	0.1308
								1337	8.250	0.1384
								1407	7.060	0.1450
								1437	6.150	0.1507
								1507	5.410	0.1557

1970 SELECTED RUNOFF EVENT			RIESEL (WACO), TEXAS WATERSHED C						
ANTECEDENT CONDITIONS			RAINFALL			RUNOFF			
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)
EVENT OF FEBRUARY 1, 1970 (CONTINUED)									
							2- 1	1607	4.330
								1707	3.470
								1807	2.860
								1907	2.400
								2007	2.060
								2107	1.700
								2207	1.490
								2307	1.310
								2400	1.160
									0.1640
									0.1707
									0.1761
									0.1806
									0.1844
									0.1876
									0.1903
									0.1927
									0.1946

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.001713.



RIESEL (WACO), TEXAS WATERSHED D

LOCATION: McLennan Co., Texas; 14 mi. ESE of Waco; Brazos River Basin.

AREA: 1110.0v acres 1.73 sq. miles

MONTHLY PRECIPITATION AND RUNOFF (inches)														RIESEL (WACO), TEXAS		WATERSHED D			
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual					
1970	P	0.95	4.60	4.42	2.49	2.71	0.95	0.19	0.92	6.52	3.12	1.29	0.84	27.09					
	Q	0.064	1.200	2.317	0.276	0.048	0.001	0.0	0.0	0.002	0.078	0.0	0.6	3.986					
STA AV	P	2.00	2.82	2.32	3.85	3.92	3.52	1.49	2.42	3.14	2.75	2.95	2.29	33.47					
	Q	0.474	0.641	0.678	1.063	1.029	0.639	0.181	0.203	0.344	0.308	0.460	0.497	6.515					
ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																			
		Maximum Discharge		1 Hour		2 Hours		Maximum Volume for Selected Time Interval		6 Hours		12 Hours		1 Day		2 Days		8 Days	
		Date	Rate	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.
1970		3- 6	0.223	3- 6	0.215	3- 6	0.383	3- 6	0.640	3- 7	0.783	3- 6	1.495	3- 6	1.589	2-28	2.208		
		MAXIMUMS FOR PERIOD OF RECORD																	
		3-29	2.110	3-25	1.930	3-29	3.150	3-29	4.590	3-29	4.880	3-29	5.630	3-29	5.690	4-19	9.660		
		1965		1965		1965		1965		1965		1965		1965		1957			

NOTES: Watershed conditions: 69% pasture; 8% cotton; 1% corn; 4% fall planted small grain, mostly oats; 5% row sorghum; 2% gravel and paved roads; 11% other. Approximately 90% of other is Johnsongrass and weeds in conservation reserve, but neither tilled nor grazed. For map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1956-59, USDA Misc. Pub. 945, p. 42.4-6. Precipitation and runoff records began Dec. 1937; station not in operation July 1943 to Mar. 1, 1949; part-year amounts not included in averages. Precipitation data from Thiessen method using rain gages 5, 14, 20 and 26A. For long-time precipitation records, see National Weather Service records at Waco, Texas.

1970		DAILY PRECIPITATION (inches)					RIESEL (WACO), TEXAS				WATERSHED D			
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
1	0.0	1.21	0.32	0.04E	0.0	0.05E	0.09E	0.0	0.81	0.0	0.01E	0.0		
2	0.0	0.9	0.29	0.0	0.0	0.0	0.0	0.0	0.42	0.0	0.0	0.0		
3	0.05E	0.0	0.21	0.0	0.0	0.0	0.0	0.12E	0.0	0.0	0.0	0.0		
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
5	0.77	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
6	0.0	0.37	1.17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
7	0.0	0.0	0.89	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.68	0.0	0.0		
9	0.0	0.0	0.0	1.62	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
10	0.04E	0.0	0.0	0.05	0.0	0.0	0.0	0.0	0.46	0.0	0.0	0.0		
11	0.0	0.0	0.38	0.0	0.0	0.0	0.0	0.02E	0.0	0.57	0.0	0.0		
12	0.0	0.0	0.0	0.0	0.0 E	0.0	0.0	0.0	0.27	0.04	0.0	0.0		
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.13	0.0	0.28	0.0		
14	0.03E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
15	0.0	0.40	0.0	0.0	0.10E	0.0	0.0	0.0	0.04E	0.0	0.0	0.08E		
16	0.0	0.0	0.41	0.03E	0.0	0.0	0.0	0.0	2.58	0.0	0.0	0.0		
17	0.0	0.0	0.16	0.0	0.0	0.0	0.0	0.0	0.34	0.0	0.0	0.0		
18	0.07S	0.0	0.0	0.19	0.0	0.0	0.0	0.0	0.0	0.13	0.0	0.0		
19	0.0	0.0	0.05E	0.11	0.0	0.0	0.0	0.0	0.0	0.04	0.0	0.05E		
20	0.0	0.0	0.32	0.0	0.0	0.0	0.0	0.0	0.0 E	0.0	0.0	0.15E		
21	0.0	0.0	0.19	0.0	0.0	0.0	0.09E	0.0	0.06E	0.0	0.0	0.02E		
22	0.0	0.0	0.0	0.0	0.16	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
23	0.0	0.30	0.0	0.0	0.01E	0.0	0.0	0.06E	0.29	1.64	0.0	0.0		
24	0.0	1.62	0.0	0.0	0.05E	0.0	0.01E	0.0	0.0	0.0	0.0	0.0		
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.74	0.0	0.0	0.0		
26	0.0	0.0	0.0	0.0	0.32	0.0	0.0	0.0	0.38	0.0	0.0	0.0		
27	0.0	2.45	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
28	0.0	0.23	0.03E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.70	0.0	0.0	0.0	0.0		
30	0.0	0.0	0.46	1.15	0.0	0.0	0.02	0.0	0.0	0.0	0.0	0.55		
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
TOTAL	0.95	4.60	4.42	2.49	2.71	0.05	0.19	0.92	6.52	3.12	0.29	0.84		
STA AV	2.00	2.82	2.32	3.85	3.92	3.52	1.49	2.42	3.14	2.75	2.95	2.29		

NOTES: For daily air temperatures in the vicinity, see table for Watershed C, p. 42.002-1. Precipitation values are Thiessen weighted average of rain gages 5, 14, 20, and 26A. Records began Dec. 1937; station not in operation July 1943 to Mar. 1, 1949; part-year amounts not included in averages. STA AV based on 26 yr period. Estimate codes may indicate that non-significant event totals are included.

1970 MEAN DAILY DISCHARGE (cfs)													RIESEL (WACO), TEXAS WATERSHED D	
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
1	0.012	6.710	5.655	0.0	0.0	0.057	0.0	0.0	0.0	0.0	0.0	0.0		
2	0.004	0.662	7.322	0.0	0.0	0.004	0.0	0.0	0.0	0.0	0.0	0.0		
3	0.001	0.064	7.286	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
4	0.0	0.018	1.256	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
5	2.168	0.003	0.266	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
6	0.662	0.096	12.153	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
7	0.078	0.212	59.202	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
8	0.032	0.074	3.109	0.0	0.0	0.0	0.0	0.0	0.0	0.004	0.0	0.0		
9	0.009	0.024	0.493	2.739	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
10	0.006	0.007	0.136	9.651	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
11	0.009	0.002	0.302	0.375	0.0	0.0	0.0	0.0	0.0	0.001	0.0	0.0		
12	0.003	0.0	0.243	0.092	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
13	0.0 T	0.0	0.092	0.022	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
14	0.0	0.0	0.040	0.003	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
15	0.0	0.001	0.023	0.0 T	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
16	0.0	0.008	0.200	0.0	0.0	0.0	0.0	0.0	0.043	0.0	0.0	0.0		
17	0.0	0.009	3.795	0.0 T	0.0	0.0	0.0	0.0	0.025	0.0	0.0	0.0		
18	0.0	0.003	0.389	0.0 T	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
19	0.0	0.0 T	0.194	0.004	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
20	0.0	0.0	0.124	0.001	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
21	0.0	0.0	4.774	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
22	0.0	0.0	0.697	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
23	0.0	0.0	0.183	0.0	0.0	0.0	0.0	0.0	0.0	3.530	0.0	0.0		
24	0.0	32.883	0.072	0.0	0.0	0.0	0.0	0.0	0.0	0.112	0.0	0.0		
25	0.0	4.912	0.033	0.0	0.0	0.0	0.0	0.0	0.038	0.002	0.0	0.0		
26	0.0	0.378	0.004	0.0	0.0	0.0	0.0	0.0	0.001	0.0	0.0	0.0		
27	0.0	0.153	0.001	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
28	0.0	9.732	0.001	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
29	0.0	0.0	0.0 T	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
30	0.0	0.0	0.0	0.0	0.663	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
31	0.0	0.0	0.0	0.0	1.572	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
MEAN	0.0962	1.9982	3.4850	0.4296	0.0721	0.0020	0.0	0.0	0.0036	0.1177	0.0	0.0		
INCHES	0.064	1.200	0.276	0.048	0.001	0.001	0.0	0.0	0.002	0.078	0.0	0.0		
STA AV	0.474	0.641	0.678	1.063	1.029	0.639	0.181	0.203	0.344	0.308	0.460	0.497		

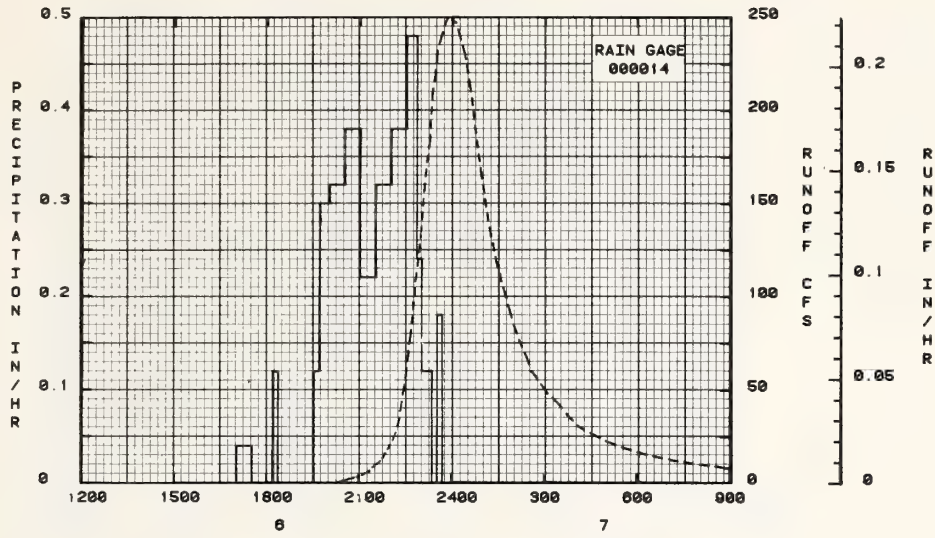
NOTES: To convert mean daily discharge in CFS to IN/DAY, multiply by 0.021443. Records began Dec. 1937; station not in operation July 1943 to Mar. 1, 1949; part-year amounts not included in averages. STA AV based on 26 yr period.

1970			SELECTED RUNOFF EVENT			RIESEL (WACO), TEXAS			WATERSHED D		
ANTECEDENT CONDITIONS			RAINFALL			RUNOFF					
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.	
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)	
EVENT OF MARCH 6 - 7, 1970											
RG 000014											
3- 6	0.0	0.002	3- 6	1702	0.0	0.0	3- 6	1936	0.107	0.0	
				1732	0.0400	0.02		1946	0.109	0.0	
				1812	0.0	0.02		1956	0.122	0.0	
				1822	0.1200	0.04		2006	0.133	0.0	
				1932	0.0	0.04		2016	0.168	0.0	
WATERSHED CONDITIONS:											
69% pasture, dormant, all											
classes; 14% tilled, but											
not planted; 4% fall planted											
small grain, mostly oats, 6											
to 8 inches high; 2% gravel											
and paved roads; 11% other.											
Approx. 90% of other is											
Johnsongrass and weeds in											
conservation reserve,											
neither tilled nor grazed.											
				2102	0.3870	0.51		2026	0.962	0.0	
				2132	0.2200	0.62		2028	1.242	0.0	
				2202	0.3200	0.78		2032	1.526	0.0001	
				2232	0.3800	0.97		2036	1.757	0.0002	
				2252	0.4800	1.13		2041	2.113	0.0003	
				2302	0.2400	1.17		2046	2.448	0.0005	
				2322	0.1200	1.21		2051	2.832	0.0007	
				2332	0.0	1.21		2056	3.220	0.0009	
				2342	0.1800	1.24		2101	3.704	0.0012	
								2106	4.272	0.0015	
								2111	5.078	0.0018	
								2116	5.598	0.0022	
								2121	6.735	0.0027	
								2126	8.472	0.0033	
								2131	9.316	0.0040	
								2136	10.556	0.0047	
								2141	11.714	0.0055	
								2146	13.476	0.0064	
								2151	15.886	0.0075	
								2156	18.089	0.0088	
								2200	20.463	0.0100	
								2206	22.841	0.0119	
								2211	26.819	0.0137	
								2216	31.292	0.0159	
								2221	40.050	0.0186	
								2226	49.000	0.0219	

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.000893.

1970 SELECTED RUNOFF EVENT			BILSEL (WACO), TEXAS			WATERSHED D		
ANTECEDENT CONDITIONS			RAINFALL			RUNOFF		
Date Mo-Day	Rainfall (inches)	Runoff (inches)	Date Mo-Day	Time of Day	Intensity (in/hr)	Acc. (inches)	Date Mo-Day	Time of Day
								Rate (cfs)
								Acc. (inches)
EVENT OF MARCH 6 - 7, 1970 (CONTINUED)								
							3- 6	
							2231	58.000
							2236	71.000
							2241	82.000
							2246	97.000
							2251	112.500
							2256	124.000
							2301	137.500
							2306	157.000
							2311	172.000
							2316	183.000
							2321	208.000
							2326	218.000
							2331	232.000
							2336	237.500
							2341	242.000
							2346	247.000
							2351	250.000
							2400	248.000
							3- 7	
							7	247.000
							16	238.000
							26	227.500
							36	210.000
							46	187.500
							56	167.000
							106	148.000
							116	132.000
							126	119.000
							136	108.000
							146	99.000
							156	88.500
							206	80.000
							216	73.000
							226	67.000
							236	59.500
							246	56.000
							306	48.000
							326	43.000
							346	36.000
							406	30.329
							436	25.779
							506	21.601
							536	18.793
							606	16.139
							636	14.118
							706	12.431
							736	10.964
							806	9.833
							836	8.819
							906	7.786
							936	7.328
							1034	7.050
							1024	6.735

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.000893.



RIESEL (WACO), TEXAS WATERSHED G

LOCATION: McLennan and Falls Counties, Texas; 16 mi. S.E. of Waco; Brazos River Basin.

AREA: 4380.00 acres 6.84 sq. miles

MONTHLY PRECIPITATION AND RUNOFF (inches)														RIESEL (WACO), TEXAS WATERSHED G											
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual											
1970	P	0.90	4.68	4.48	2.57	2.32	0.09	0.45	0.78	6.63	3.43	0.33	0.86	27.51											
	Q	0.051	1.258	2.564	0.529	0.000	0.0	0.0	0.0	0.0	0.135	0.0	0.0	4.538											
STA AV	P	2.20	2.99	2.33	3.61	3.48	4.30	1.62	2.78	3.37	2.89	2.98	2.56	35.12											
	Q	0.691	0.819	0.763	0.738	0.741	0.981	0.179	0.183	0.338	0.194	0.507	0.528	6.663											
ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																									
		Maximum Discharge				Maximum Volume for Selected Time Interval																			
		Date	Rate	1 Hour Date	Vol.	2 Hours Date	Vol.	6 Hours Date	Vol.	12 Hours Date	Vol.	1 Day Date	Vol.	2 Days Date	Vol.	8 Days Date	Vol.								
1970		3- 7	0.116	3- 7	0.113	3- 7	0.219	3- 7	0.568	3- 7	0.840	3- 6	1.423	3- 6	1.605	2-28	2.298								
MAXIMUMS FOR PERIOD OF RECORD																									
		3-29 1965	0.950	3-29 1965	0.910	3-29 1965	1.720	3-29 1965	3.390	3-29 1965	3.940	3-29 1965	4.030	3-29 1965	4.740	11-22 1940	4.820								

NOTES: Watershed conditions: 40% pasture; 2% tilled, but not planted; 9% cotton; 5% corn; 8% fall planted small grain, largely oats; 4% sorghum; 2% gravel and paved roads; 30% other. Approximately 90% of other is Johnsongrass and weeds in conservation reserve, but neither tilled nor grazed. For map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1956-59, USDA Misc. Pub. 945, p. 42.4-6. Precipitation and runoff records began Jan. 1938; station not in operation July 1943 to July 1, 1957; part-year amounts not included in averages. Precipitation data from Thiessen method using rain gages 5, 14, 20, 26A, 30A, 43A, 48A, 56A, 65A, 70, 74A, 84A, and 89. For long-time precipitation records, see National Weather Service records at Waco, Texas.

1970 DAILY PRECIPITATION (inches)														RIESEL (WACO), TEXAS WATERSHED			
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec					
1	0.0	1.32	0.29E	0.03E	0.01E	0.08E	0.02E	0.0	0.88	0.0	0.04E	0.0					
2	0.0	0.0	0.16E	0.0	0.0	0.0	0.0	0.0	0.36	0.0	0.0	0.0					
3	0.07E	0.0	0.36	0.0	0.0	0.0	0.0	0.07E	0.0	0.0	0.0	0.0					
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0 E	0.0	0.0	0.0	0.0					
5	0.73	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0					
6	0.0	0.31	1.16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0					
7	0.0	0.0	1.02	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0					
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.58	0.0	0.0					
9	0.0	0.0	0.0	1.86	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0					
10	0.04E	0.0	0.0	0.05	0.0	0.0	0.0	0.0	0.43E	0.0	0.0	0.0					
11	0.0	0.0	0.33	0.0	0.0	0.0	0.0	0.03E	0.0	0.72	0.0	0.0					
12	0.0	0.0	0.0	0.0	0.01E	0.0	0.0	0.0	0.22E	0.05	0.0	0.0					
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.14E	0.0	0.29	0.0					
14	0.03E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0					
15	0.0	0.36	0.0	0.0	0.07E	0.0	0.0	0.0	0.02E	0.0	0.0	0.11E					
16	0.0	0.0	0.42	0.02E	0.0	0.0	0.0	0.0	2.14	0.0	0.0	0.0					
17	0.0	0.0	0.16	0.0	0.0	0.0	0.0	0.0	0.28E	0.0	0.0	0.0					
18	0.03E	0.0	0.0	0.23	0.0	0.0	0.0	0.0	0.0	0.16	0.0	0.0					
19	0.0	0.0	0.05E	0.12	0.0	0.0	0.0	0.0	0.0	0.06	0.0	0.05E					
20	0.0	0.0	0.30	0.0	0.0	0.0	0.0	0.0	0.01E	0.0	0.0	0.13E					
21	0.0	0.0	0.19	0.0	0.0	0.0	0.12E	0.0	0.06E	0.0	0.0	0.03E					
22	0.0	0.0	0.0	0.0	0.15E	0.0	0.0	0.0	0.0	0.0	0.0	0.0					
23	0.0	0.30	0.0	0.0	0.02E	0.0	0.0	0.03E	0.44	1.85	0.0	0.0					
24	0.0	1.74	0.0	0.0	0.07E	0.01E	0.31E	0.0	0.0	0.0	0.0	0.0					
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.12	0.0	0.0	0.0					
26	0.0	0.0	0.0	0.0	0.28	0.0	0.0	0.0	0.53	0.0	0.0	0.0					
27	0.0	0.44	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0					
28	0.0	0.20	0.04E	0.0	0.86	0.0	0.0	0.0	0.0	0.0	0.0	0.0					
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.63	0.0	0.0	0.0	0.0					
30	0.0	0.0	0.0	0.25E	0.85	0.0	0.0	0.03	0.0	0.0	0.0	0.54					
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0					
TOTAL	0.90	4.68	4.48	2.57	2.32	0.09	0.45	0.78	6.63	3.43	0.33	0.86					
STA AV	2.20	2.99	2.33	3.61	3.48	4.30	1.62	2.78	3.37	2.89	2.98	2.56					

NOTES: For daily air temperatures in the vicinity, see table for Watershed C, p. 42.002-1. Precipitation values are Thiessen weighted average of rain gages 5, 14, 20, 26A, 30A, 43A, 48A, 56A, 65A, 70, 74A, 84A, and 89. Records began Jan. 1938; station not in operation July 1943 to July 1, 1957; part-year amounts not included in averages. STA AV based on 18 yr period. Estimate codes may indicate that non-significant event totals are included.

1970 MEAN DAILY DISCHARGE (cfs)													RIESEL (WACO), TEXAS WATERSHED G	
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
1	0.07	30.77	23.32	0.09	0.01	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
2	0.05	4.56	19.76	0.05	0.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
3	0.04	0.63	54.83	0.03	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
4	0.02	0.21	8.95	0.02	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
5	3.98	0.10	2.11	0.01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
6	4.07	0.30	18.23	0.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
7	0.42	0.50	254.01	0.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
8	0.14	0.38	25.41	0.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
9	0.05	0.20	3.65	19.17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
10	0.06	0.09	1.41	72.48	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
11	0.09	0.05	2.18	3.40	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
12	0.04	0.02	2.02	0.97	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
13	0.03	0.02	0.92	0.28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
14	0.03	0.03	0.49	0.11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
15	0.03	0.23	0.34	0.08	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
16	0.03	0.10	0.28	0.09	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
17	0.03	0.05	19.61	0.10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
18	0.02	0.04	2.55	0.08	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
19	0.02	0.02	1.52	0.27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
20	0.02	0.01	0.94	0.10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
21	0.02	0.00	22.14	0.03	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
22	0.02	0.01	4.16	0.01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
23	0.02	0.07	1.42	0.01	0.0	0.0	0.0	0.0	0.0	23.79	0.0	0.0		
24	0.02	119.91	0.64	0.01	0.0	0.0	0.0	0.0	0.0	1.00	0.0	0.0		
25	0.02	35.53	0.35	0.02	0.0	0.0	0.0	0.0	0.0	0.01	0.0	0.0		
26	0.02	2.75	0.17	0.01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
27	0.02	1.19	0.10	0.01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
28	0.03	34.74	0.10	0.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
29	0.01	0.07	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
30	0.00	0.06	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
31	0.0	0.08	0.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
MEAN	0.303	8.271	15.220	3.248	0.000	0.0	0.0	0.0	0.0	0.600	0.0	0.0		
INCBS	0.051	1.258	2.564	0.529	0.030	0.0	0.0	0.0	0.0	0.135	0.0	0.0		
STA AV	0.691	0.819	0.763	0.738	0.741	0.981	0.179	0.183	0.338	0.194	0.507	0.528		

NOTES: To convert mean daily discharge in CFS to IN/DAY, multiply by 0.005434. Records began Jan. 1938; station not in operation July 1943 to July 1, 1957; part-year amounts not included in averages. STA AV based on 18 yr period.

1970			SELECTED RUNOFF EVENT			RIESEL (WACO), TEXAS			WATERSHED G		
ANTECEDENT CONDITIONS			RAINFALL			RUNOFF					
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.	
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)	
EVENT OF FEBRUARY 1 - 2, 1970											
RG 000014											
2- 1	0.04	0.0	2- 1	303	0.0	0.0	2- 1	445	0.001	0.0	
				333	0.0800	0.04		450	0.003	0.0	
				423	0.0	0.04		455	0.005	0.0	
				433	0.1200	0.06		500	0.009	0.0	
				453	0.0	0.06		515	0.014	0.0	
WATERSHED CONDITIONS:											
40% pasture, dormant, all											
classes; 15% tilled, but											
not planted; 8% fall planted											
small grain, mostly oats, 8											
to 10 inches high; 2% gravel											
and paved roads; 35% other.											
Approx. 90% of other is											
Johnsongrass and weeds in											
conservation reserve, neither											
tilled nor grazed.											
				533	0.1200	0.30		605	0.196	0.0	
				537	0.4500	0.33		610	0.229	0.0	
				541	0.9000	0.39		615	0.332	0.0	
				547	0.9000	0.48		620	0.547	0.0	
				551	1.2000	0.56		625	0.799	0.0	
				553	0.6000	0.58		630	1.085	0.0	
				603	0.0600	0.59		635	1.326	0.0	
				613	0.2400	0.63		640	1.641	0.0	
				623	0.3000	0.68		645	1.906	0.0	
				643	0.0900	0.71		650	2.286	0.0	
				703	0.1800	0.77		655	2.697	0.0	
				718	0.2400	0.83		700	3.361	0.0001	
				723	0.4800	0.87		705	4.108	0.0002	
				733	0.3600	0.93		710	4.953	0.0003	
				803	0.2200	1.04		715	5.823	0.0004	
				813	0.3000	1.09		720	6.974	0.0005	
								725	8.561	0.0006	
								730	10.518	0.0008	
								735	13.271	0.0010	
								740	16.152	0.0013	
								745	18.350	0.0016	
								750	21.202	0.0020	
								755	24.554	0.0024	
								800	30.198	0.0029	
								805	33.306	0.0035	

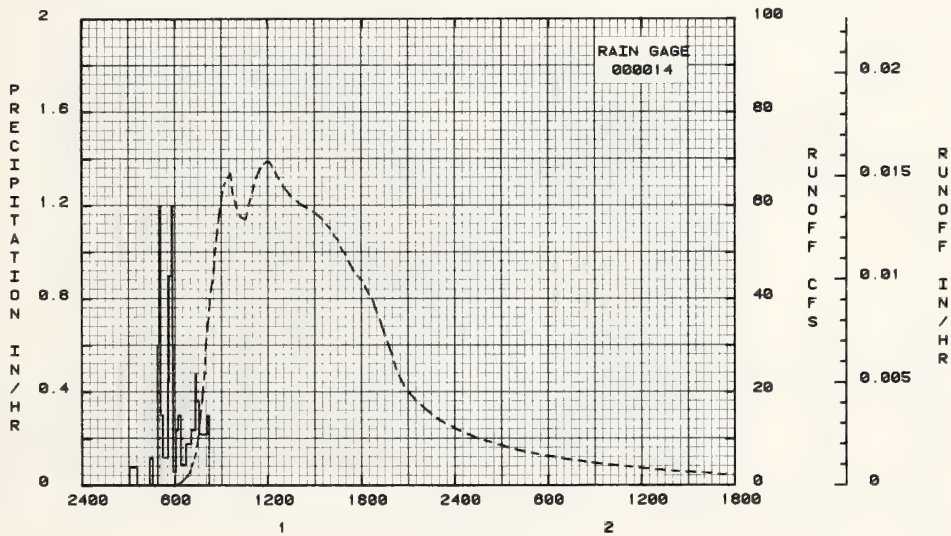
NOTES: To convert runoff in CFS to IN/HR, multiply by 0.0002264.

1970	SELECTED RUNOFF EVENT			RIESEL (WACO), TEXAS WATERSHED 6							
ANTECEDENT CONDITIONS			RAINFALL			RUNOFF					
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.	
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)	
EVENT OF FEBRUARY 1 - 2, 1970 (CONTINUED)											
								2- 1	810	36.000	0.0042
									815	40.000	0.0049
									820	42.000	0.0057
									825	44.000	0.0065
									830	46.500	0.0074
									835	49.500	0.0083
									840	52.500	0.0093
									845	55.000	0.0103
									850	57.500	0.0114
									855	59.500	0.0125
									900	61.500	0.0136
									905	63.000	0.0148
									910	64.500	0.0160
									915	65.000	0.0172
									925	66.000	0.0197
									930	66.500	0.0210
									935	67.000	0.0223
									945	62.500	0.0247
									1000	59.500	0.0282
									1015	57.500	0.0315
									1025	57.200	0.0337
									1035	57.000	0.0359
									1045	60.000	0.0381
									1100	63.000	0.0416
									1115	66.000	0.0453
									1130	68.000	0.0491
									1145	69.000	0.0530
									1155	69.500	0.0556
									1205	69.500	0.0582
									1215	68.500	0.0608
									1230	67.000	0.0646
									1300	64.000	0.0720
									1330	62.000	0.0791
									1400	60.500	0.0860
									1430	59.500	0.0928
									1500	58.500	0.0995
									1530	57.000	0.1060
									1545	56.000	0.1092
									1600	55.000	0.1123
									1615	53.500	0.1154
									1630	52.500	0.1184
									1645	50.500	0.1213
									1700	49.500	0.1241
									1715	47.500	0.1268
									1730	46.000	0.1294
									1745	45.000	0.1320
									1800	44.000	0.1345
									1815	42.500	0.1369
									1830	41.000	0.1393
									1845	39.500	0.1416
									1900	37.000	0.1438
									1915	35.000	0.1458
									1930	32.308	0.1477
									1945	30.139	0.1495
									2000	27.972	0.1511
									2015	24.907	0.1526
									2030	23.026	0.1540
									2045	21.380	0.1553
									2100	20.119	0.1565
									2130	18.253	0.1587
									2200	16.806	0.1607
									2230	15.392	0.1625
									2300	14.099	0.1642
									2400	12.246	0.1672
								2- 2	130	10.080	0.1710
									300	8.587	0.1742
									430	7.218	0.1769
									600	6.237	0.1792
									730	5.484	0.1812
									900	4.768	0.1829
									1030	4.228	0.1844
									1200	3.707	0.1857
									1330	3.197	0.1869
									1500	2.853	0.1879
									1630	2.526	0.1888

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.0002264.

1970			SELECTED RUNOFF EVENT				RIESEL (WACO), TEXAS WATERSHED G			
ANTECEDENT CONDITIONS			RAINFALL				RUNOFF			
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)
EVENT OF FEBRUARY 1 - 2, 1970 (CONTINUED)										
				2- 2	1700	2.315			0.1891	
					1800	2.219			0.1896	
					1930	1.957			0.1903	
					2100	1.742			0.1909	
					2230	1.531			0.1915	
					2400	1.281			0.1920	

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.0002264.



EVENT OF FEBRUARY 1 - 2, 1970
RIESEL (WACO), TEXAS WATERSHED G

RIESEL (WACO), TEXAS WATERSHED W-1

LOCATION: Falls Co., Texas; 19 mi. SE of Waco; Brazos River Basin.

AREA: 174.00 acres

MONTHLY PRECIPITATION AND RUNOFF (inches)								RIESEL (WACO), TEXAS				WATERSHED W-1					
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual			
1970	P	0.84	4.71	5.01	2.73	2.07	0.39	0.32	1.07	5.68	3.32	0.37	0.82	27.32			
	Q	0.191	1.355	3.448	0.620	0.045	0.006	0.0	0.0	0.0	0.012	0.0	0.0	5.677			
STA AV	P	2.25	2.79	2.63	4.00	4.26	3.39	1.50	2.08	2.58	2.64	2.93	2.53	33.49			
	Q	0.501	0.634	0.757	1.039	1.219	0.618	0.116	0.391	0.137	0.176	0.383	0.449	6.120			
ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																	
		Maximum Discharge		1 Hour		2 Hours		Maximum Volume for Selected Time Interval									
		Date	Rate	Date	Vol.	Date	Vol.	Date	6 Hours Vol.	Date	12 Hours Vol.	Date	1 Day Vol.	Date	2 Days Vol.	Date	8 Days Vol.
1970		3- 7	0.276	3- 7	0.269	3- 7	0.498	3- 7	1.062	3- 7	1.192	3- 6	1.917	3- 6	2.032	2-27	3.030
MAXIMUMS FOR PERIOD OF RECORD																	
		5- 1	4.510	5- 1	2.990	5- 1	5.570	5- 1	6.910	5- 1	6.920	5- 1	7.050	4-30	9.200	4-29	11.060
		1944		1944		1944		1944		1944		1944		1944		1944	

NOTES: Watershed conditions: 11% cotton; 85% pasture; 3% roads; and 1% other. Approximately 90% of other is Johnsongrass and weeds in conservation reserve; but neither tilled nor grazed. Area reported as 174 acres beginning 1969. Previously reported as 176 acres prior publications. For map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1963, USDA Misc. Pub. 1164, p. 42.6-6 (Revised). Precipitation and runoff records began July 1937; part-year amounts not included in averages. Precipitation data from Thiessen method using rain gages 75A, 89, W-2, W-2A, and W-5A. For long-time precipitation records, see National Weather Service records at Waco, Texas.

1970 DAILY PRECIPITATION (inches)													RIESEL (WACO), TEXAS WATERSHED W-1	
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
1	0.0	1.37	0.28	0.02E	0.03E	0.39	0.0	0.0	0.85	0.0	0.05E	0.0		
2	0.0	0.0	0.95E	0.0	0.0	0.0	0.0	0.0	0.35	0.0	0.0	0.0		
3	0.08E	0.0	0.92	0.0	0.0	0.0	0.0	0.08E	0.0	0.0	0.0	0.0		
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.04E	0.0	0.0	0.0	0.0		
5	0.68	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
6	0.0	0.31	1.21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
7	0.0	0.0	1.28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.18	0.0	0.0		
9	0.0	0.0	0.0	2.11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
10	0.05E	0.00E	0.0	0.06	0.0	0.0	0.0	0.0	0.00E	0.0	0.0	0.0		
11	0.0	0.0	0.23	0.0	0.0	0.0	0.0	0.06E	0.0	1.08	0.0	0.0		
12	0.0	0.0	0.0	0.0	0.02E	0.0	0.0	0.0	0.01E	0.05	0.0	0.0		
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.23	0.0	0.32	0.0		
14	0.03E	0.03E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
15	0.0	0.40	0.0	0.0	0.05E	0.0	0.0	0.0	0.0	0.0	0.0	0.12E		
16	0.0	0.0	0.40	0.02E	0.0	0.0	0.0	0.0	1.41	0.0	0.0	0.0		
17	0.0	0.0	0.15	0.0	0.0	0.0	0.0	0.0	0.10E	0.0	0.0	0.0		
18	0.0 S	0.0	0.0	0.27	0.0	0.0	0.0	0.0	0.0	0.20	0.0	0.0		
19	0.0	0.0	0.03E	0.13	0.0	0.0	0.0	0.0	0.0	0.08	0.0	0.05E		
20	0.0	0.0	0.26	0.0	0.0	0.0	0.0	0.0	0.04E	0.0	0.0	0.11E		
21	0.0	0.0	0.17	0.0	0.0	0.0	0.08E	0.0	0.12	0.0	0.0	0.04E		
22	0.0	0.0	0.0	0.0	0.21	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
23	0.0	0.28	0.0	0.0	0.01E	0.0	0.0	0.0 E	0.50	1.73	0.0	0.0		
24	0.0	1.85	0.0	0.0	0.10E	0.0	0.24E	0.0	0.0	0.0	0.0	0.0		
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.45	0.0	0.0	0.0		
26	0.0	0.0	0.0	0.0	0.27	0.0	0.0	0.0	0.61	0.0	0.0	0.0		
27	0.0	0.36	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
28	0.0	0.13	0.04E	0.0	0.80	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.87	0.0	0.0	0.0	0.0		
30	0.0	0.0	0.12E	0.57	0.0	0.0	0.0	0.01	0.0	0.0	0.0	0.50		
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
TOTAL	0.84	4.71	5.01	2.73	2.07	0.39	0.32	1.07	5.68	3.32	0.37	0.82		
STA AV	2.25	2.79	2.63	4.00	4.26	3.30	1.50	2.08	2.58	2.64	2.93	2.53		

NOTES: For daily air temperatures in the vicinity, see table for Watershed C, p. 42.002-1. Precipitation values are Thiessen weighted average of rain gages 75A, 89, W-2, W-2A, and W-5A. Records began July 1937; part-year amounts not included in averages. STA AV based on 33 yr period. Estimate codes may indicate that non-significant event totals are included.

1970 MEAN DAILY DISCHARGE (cfs) RIESEL (WACO), TEXAS WATERSHED W-1												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.027	1.437	1.369	0.330	0.020	0.026	0.0	0.0	0.0	0.0	0.0	0.0
2	0.033	0.094	0.541	0.021	0.012	0.006	0.0	0.0	0.0	0.0	0.0	0.0
3	0.031	0.038	4.634	0.021	0.010	0.003	0.0	0.0	0.0	0.0	0.0	0.0
4	0.023	0.035	0.435	0.019	0.009	0.003	0.0	0.0	0.0	0.0	0.0	0.0
5	0.483	0.034	0.208	0.015	0.010	0.002	0.0	0.0	0.0	0.0	0.0	0.0
6	0.089	0.153	3.793	0.017	0.008	0.002	0.0	0.0	0.0	0.0	0.0	0.0
7	0.330	0.090	10.610	0.014	0.007	0.001	0.0	0.0	0.0	0.0	0.0	0.0
8	0.033	0.065	0.647	0.014	0.008	0.001	0.0	0.0	0.0	0.0	0.0	0.0
9	0.031	0.042	0.232	2.625	0.011	0.0 T	0.0	0.0	0.0	0.0	0.0	0.0
10	0.043	0.030	0.116	1.114	0.011	0.0 T	0.0	0.0	0.0	0.0	0.0	0.0
11	0.061	0.029	0.176	0.069	0.009	0.001	0.0	0.0	0.0	0.0	0.0	0.0
12	0.033	0.026	0.142	0.044	0.010	0.0 T	0.0	0.0	0.0	0.0	0.0	0.0
13	0.030	0.030	0.083	0.025	0.010	0.0 T	0.0	0.0	0.0	0.0	0.0	0.0
14	0.036	0.033	0.069	0.022	0.008	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.035	0.156	0.058	0.028	0.009	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.032	0.052	0.064	0.036	0.009	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.030	0.035	0.769	0.036	0.004	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	0.023	0.030	0.098	0.038	0.004	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	0.022	0.319	0.115	0.095	0.004	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.023	0.021	0.116	0.022	0.003	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	0.022	0.023	0.711	0.022	0.003	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.023	0.030	0.142	0.023	0.010	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	0.025	0.067	0.081	0.023	0.012	0.0	0.0	0.0	0.0	0.088	0.0	0.0
24	0.027	5.259	0.063	0.025	0.012	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.029	0.723	0.049	0.027	0.010	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	0.026	0.174	0.037	0.022	0.012	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	0.024	0.237	0.031	0.022	0.011	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	0.023	0.945	0.028	0.019	0.039	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	0.014	0.027	0.019	0.008	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	0.016	0.031	0.026	0.020	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	0.019	0.029	0.015	0.015	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MEAN	0.0451	0.3539	0.8130	0.1511	0.0106	0.0015	0.0	0.0	0.0	0.0028	0.0	0.0
INCHES	0.191	1.355	3.448	0.620	0.045	0.036	0.0	0.0	0.0	0.012	0.0	0.0
STA AV	0.501	0.634	0.757	1.039	1.219	0.618	0.116	0.091	0.137	0.176	0.383	0.449

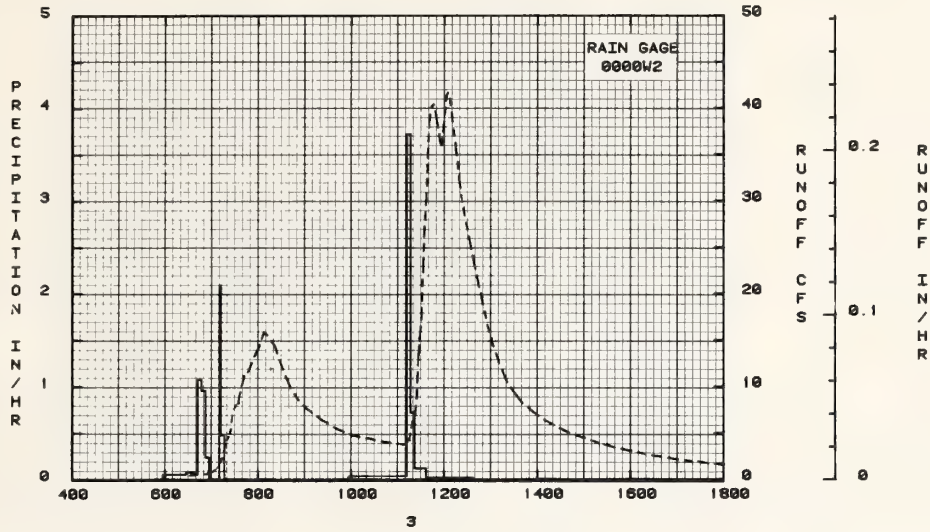
NOTES: To convert mean daily discharge in CPS to IN/DAY, multiply by 0.136791. Records began July 1937; part-year amounts not included in averages. STA AV based on 33 yr period.

1970 SELECTED RUNOFF EVENT RIESEL (WACO), TEXAS WATERSHED W-1												
ANTECEDENT CONDITIONS			RAINFALL									
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Runoff	Rate	Acc.	
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)		(inches)	
EVENT OF MARCH 3, 1970												
BG 0000W2												
3- 3	0.0	0.017	3- 3	557	0.0	0.0	3- 3	632	0.501	0.0		
				627	0.0600	0.03		642	0.561	0.0005		
				642	0.0800	0.05		652	0.652	0.0011		
				647	1.0800	0.14		657	0.721	0.0014		
				652	0.9600	0.22		702	0.864	0.0018		
WATERSHED CONDITIONS:												
11% tilled, but not planted;												
85% pasture, Bermudagrass,												
good cover, moderately												
grazed; 3% gravel roads; 1%												
Johnsongrass and weeds, not												
tilled or grazed. Straight												
row cultivation, not												
terraced.												
				1112	0.0400	0.40		716	2.991	0.0039		
				1117	3.7200	0.71		718	3.743	0.0045		
				1122	0.7200	0.77		720	4.274	0.0053		
				1137	0.1200	0.80		722	4.647	0.0061		
				1237	0.0200	0.82		724	5.025	0.0070		
								725	5.505	0.0075		
								726	6.388	0.0081		
								727	6.938	0.0087		
								729	7.624	0.0101		
								732	8.038	0.0123		
								734	8.251	0.0139		
								737	9.442	0.0164		
								742	11.192	0.0213		
								747	11.604	0.0267		
								752	12.610	0.0324		
								757	13.641	0.0386		
								802	14.486	0.0453		
								807	15.804	0.0525		
								812	15.542	0.0600		
								822	14.322	0.0742		
								832	11.850	0.0866		
								842	9.836	0.0969		
								852	8.552	0.1056		
								902	7.704	0.1133		
								922	6.410	0.1267		

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.005700.

1970 SELECTED RUNOFF EVENT			RIESEL (WACO), TEXAS WATERSHED W-1							
ANTECEDENT CONDITIONS			RAINFALL			RUNOFF				
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)
EVENT OF MARCH 3, 1970 (CONTINUED)										
							3- 3	942	5.446	0.1380
								1002	4.753	0.1477
								1022	4.424	0.1564
								1042	4.018	0.1644
								1102	3.833	0.1719
								1108	3.728	0.1741
								1112	3.971	0.1756
								1113	4.225	0.1760
								1115	4.313	0.1768
								1117	4.950	0.1777
								1118	5.578	0.1782
								1120	6.275	0.1793
								1123	7.267	0.1812
								1125	8.972	0.1827
								1126	10.858	0.1836
								1127	13.094	0.1847
								1128	14.441	0.1860
								1130	16.431	0.1889
								1131	17.707	0.1905
								1132	20.105	0.1923
								1133	23.088	0.1943
								1134	25.371	0.1966
								1135	27.298	0.1991
								1137	30.173	0.2045
								1139	34.960	0.2107
								1141	38.595	0.2177
								1143	40.170	0.2252
								1146	40.420	0.2367
								1150	39.172	0.2518
								1152	37.939	0.2591
								1155	36.157	0.2697
								1157	35.996	0.2766
								1200	38.595	0.2872
								1203	41.345	0.2985
								1205	41.683	0.3064
								1207	41.008	0.3142
								1210	39.255	0.3256
								1215	35.676	0.3434
								1220	32.149	0.3595
								1225	29.129	0.3740
								1230	26.866	0.3873
								1235	24.810	0.3956
								1240	22.681	0.4109
								1245	20.754	0.4212
								1248	19.847	0.4270
								1250	18.809	0.4307
								1256	16.609	0.4408
								1301	15.028	0.4483
								1311	12.499	0.4614
								1321	10.465	0.4723
								1331	9.235	0.4817
								1341	8.198	0.4900
								1401	6.821	0.5043
								1421	5.830	0.5163
								1441	4.988	0.5266
								1501	4.424	0.5355
								1531	3.611	0.5469
								1601	3.029	0.5564
								1631	2.542	0.5643
								1701	2.117	0.5709
								1731	1.833	0.5765
								1801	1.563	0.5813
								1901	1.304	0.5895
								2001	1.108	0.5964
								2100	0.919	0.6021
								2200	0.827	0.6071
								2300	0.776	0.6117
								2400	0.745	0.6160

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.005700.



EVENT OF MARCH 3, 1970
RIESEL (WACO), TEXAS WATERSHED W-1

RIESEL (WACO), TEXAS WATERSHED W-2

LOCATION: Falls Co., Texas; 19 mi. SE of Waco; Brazos River Basin.

AREA: 130.04 acres

MONTHLY PRECIPITATION AND RUNOFF (inches)													RIESEL (WACO), TEXAS WATERSHED W-2	
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual	
1970	P 0.84	4.53	4.79	2.73	2.25	0.42	0.26	1.23	5.35	3.50	0.38	0.76	27.52	
	Q 0.494	1.683	3.921	1.038	0.205	0.044	0.0	0.0	0.154	0.061	0.029	0.763	7.630	
STA AV	P 2.21	2.77	2.55	4.01	4.22	3.24	1.46	2.15	2.59	2.63	2.90	2.50	33.22	
	Q 0.593	0.763	0.872	1.091	1.244	0.581	0.117	0.058	0.112	0.164	0.393	0.557	6.544	
ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS														
	Maximum Discharge		1 Hour		2 Hours		Maximum Volume for Selected Time Interval		1 Day		2 Days		8 Days	
	Date	Rate	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.
1970	2-24	0.315	2-24	0.276	3- 7	0.491	3- 7	1.081	3- 7	1.230	3- 6	2.027	3- 6	2.160
													3- 1	3.186
MAXIMUMS FOR PERIOD OF RECORD														
	5- 1	4.830	5- 1	2.860	5- 1	5.400	5- 1	6.910	5- 1	6.970	5- 1	7.120	4-30	9.260
	1944		1944		1944		1944		1944		1944		1944	10.960

NOTES: Watershed conditions: 56% pasture; 20% row grain sorghum; 18% fall planted small grain, largely oats; 5% gravel and paved roads; 1% other. Approximately 90% of other is Johnsongrass and weeds in conservation reserve, but neither tilled nor grazed. Cropland farmed on contour, not terraced. Modified conservation applied 1956. For map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1963, USDA Misc. Pub. 1164, p. 42.7-5 (Revised). Precipitation and runoff records began July 1937; part-year amounts not included in averages. Precipitation data from Thiessen weighted method using rain gages W-2, W-4, W-5A, and W-6. For long-time precipitation records, see National Weather Service records at Waco, Texas.

1970	DAILY PRECIPITATION (inches)												RIESEL (WACO), TEXAS WATERSHED W-2	
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
1	0.0	1.35	0.25	0.02E	0.00E	0.42	0.0	0.0	0.80	0.0	0.06E	0.0		
2	0.0	0.0	0.05E	0.0	0.0	0.0	0.0	0.0	0.35	0.0	0.0	0.0		
3	0.06E	0.0	1.05	0.0	0.0	0.0	0.0	0.0	0.12E	0.0	0.0	0.0		
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.08E	0.0	0.0	0.0		
5	0.69	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
6	0.0	0.30	1.07	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
7	0.0	0.0	1.17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.21	0.0	0.0		
9	0.0	0.0	0.0	2.09	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
10	0.06E	0.0	0.0	0.03	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
11	0.0	0.0	0.17	0.0	0.0	0.0	0.0	0.12E	0.0	1.29	0.0	0.0		
12	0.0	0.0	0.0	0.0	0.02E	0.0	0.0	0.0	0.00E	0.05	0.0	0.0		
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.27	0.0	0.32	0.0		
14	0.03E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
15	0.0	0.35	0.0	0.0	0.05E	0.0	0.0	0.0	0.0	0.0	0.0	0.12E		
16	0.0	0.0	0.44	0.02E	0.0	0.0	0.0 E	0.0	1.20	0.0	0.0	0.0		
17	0.0	0.0	0.14	0.0	0.0	0.0	0.0	0.0	0.09E	0.0	0.0	0.0		
18	0.0 S	0.0	0.0	0.29	0.0	0.0	0.0	0.0	0.0	0.20	0.0	0.0		
19	0.0	0.0	0.02E	0.13	0.0	0.0	0.0	0.0	0.0	0.07	0.0	0.03E		
20	0.0	0.0	0.24	0.0	0.0	0.0	0.0	0.0	0.06E	0.0	0.0	0.10E		
21	0.0	0.0	0.14	0.0	0.0	0.0	0.08E	0.0	0.14	0.0	0.0	0.07E		
22	0.0	0.0	0.0	0.0	0.28	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
23	0.0	0.25	0.0	0.0	0.02E	0.0	0.0	0.0	0.54	1.68	0.0	0.0		
24	0.0	1.78	0.0	0.0	0.14	0.0	0.17E	0.0	0.0	0.0	0.0	0.0		
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.29	0.0	0.0	0.0		
26	0.0	0.0	0.0	0.0	0.38	0.0	0.0	0.0	0.62	0.0	0.0	0.0		
27	0.0	0.35	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
28	0.0	0.14	0.04E	0.0	0.76	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.86	0.0	0.0	0.0	0.0		
30	0.0	0.0	0.0	0.14E	0.59	0.0	0.0	0.06	0.0	0.0	0.0	0.45		
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
TOTAL	0.84	4.53	4.79	2.73	2.25	0.42	0.26	1.23	5.35	3.50	0.38	0.76		
STA AV	2.21	2.77	2.55	4.01	4.22	3.24	1.46	2.15	2.59	2.63	2.90	2.50		

NOTES: For daily air temperatures in the vicinity, see table for Watershed C, p. 42.002-1. Precipitation values are Thiessen weighted average of rain gages W-2, W-4, W-5A, and W-6. Records began July 1937. STA AV based on 33 yr period. Estimate codes may indicate that non-significant event totals are included.

1970 MEAN DAILY DISCHARGE (cfs) RIESEL (WACO), TEXAS WATERSHED W-2												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.069	1.697	0.517	0.102	0.059	0.062	0.0	0.0	0.0	0.0	0.020	0.007
2	0.779	0.391	0.310	0.385	0.047	0.023	0.0	0.0	0.0	0.0	0.019	0.008
3	0.071	0.358	0.160	0.074	0.042	0.015	0.0	0.0	0.0	0.0	0.017	0.007
4	0.070	0.062	0.352	0.072	0.041	0.015	0.0	0.0	0.0	0.0	0.016	0.007
5	0.460	0.068	0.171	0.065	0.037	0.014	0.0	0.0	0.0	0.0	0.018	0.009
6	0.138	0.117	2.999	0.066	0.032	0.014	0.0	0.0	0.0	0.0	0.012	0.006
7	0.086	0.088	8.420	0.060	0.032	0.012	0.0	0.0	0.0	0.0	0.007	0.004
8	0.085	0.079	0.555	0.062	0.032	0.012	0.0	0.0	0.0	0.0	0.008	0.005
9	0.086	0.068	0.200	2.321	0.035	0.011	0.0	0.0	0.0	0.0	0.005	0.008
10	0.094	0.065	0.142	1.022	0.037	0.011	0.0	0.0	0.0	0.0	0.005	0.006
11	0.093	0.068	0.171	0.111	0.035	0.012	0.0	0.0	0.0	0.0	0.005	0.005
12	0.084	0.064	0.153	0.103	0.036	0.010	0.0	0.0	0.0	0.0	0.005	0.003
13	0.085	0.069	0.123	0.088	0.031	0.010	0.0	0.0	0.0	0.0	0.005	0.001
14	0.091	0.070	0.115	0.089	0.028	0.006	0.0	0.0	0.0	0.0	0.016	0.001
15	0.087	0.133	0.113	0.097	0.034	0.004	0.0	0.0	0.0	0.0	0.010	0.009
16	0.087	0.072	0.121	0.109	0.029	0.003	0.0	0.0	0.0	0.0	0.010	0.008
17	0.085	0.066	0.070	0.106	0.019	0.001	0.0	0.0	0.0	0.0	0.006	0.005
18	0.077	0.063	0.143	0.107	0.019	0.001	0.0	0.0	0.0	0.0	0.008	0.002
19	0.078	0.050	0.154	0.144	0.020	0.001	0.0	0.0	0.0	0.005	0.009	0.002
20	0.080	0.051	0.148	0.079	0.021	0.001	0.0	0.0	0.0	0.005	0.009	0.008
21	0.080	0.059	0.501	0.073	0.015	0.0	0.0	0.0	0.0	0.004	0.011	0.010
22	0.078	0.067	0.173	0.070	0.034	0.0	0.0	0.0	0.0	0.007	0.015	0.007
23	0.073	0.099	0.136	0.070	0.040	0.0	0.0	0.0	0.0	0.008	0.008	0.004
24	0.061	4.722	0.105	0.078	0.043	0.003	0.0	0.0	0.0	0.030	0.005	0.002
25	0.059	0.434	0.092	0.074	0.035	0.0	0.0	0.0	0.0	0.014	0.007	0.002
26	0.055	0.102	0.087	0.069	0.038	0.0	0.0	0.0	0.0	0.013	0.009	0.0
27	0.059	0.144	0.089	0.069	0.033	0.0	0.0	0.0	0.0	0.017	0.010	0.0
28	0.056	0.470	0.097	0.066	0.089	0.0	0.0	0.0	0.0	0.011	0.011	0.0
29	0.043		0.095	0.065	0.029	0.0	0.0	0.0	0.0	0.014	0.013	0.0
30	0.039		0.102	0.074	0.048	0.0	0.0	0.0	0.0	0.016	0.012	0.017
31	0.040		0.102		0.047		0.0	0.0		0.017		0.003
MEAN	0.0870	0.3283	0.6909	0.1890	0.0361	0.0080	0.0	0.0	0.0	0.0272	0.0111	0.0051
INCHES	0.494	1.683	3.921	1.038	0.205	0.044	0.0	0.0	0.0	0.154	0.061	0.029
STA AV	0.593	0.763	0.872	1.091	1.244	0.581	0.117	0.058	0.112	0.164	0.393	0.557

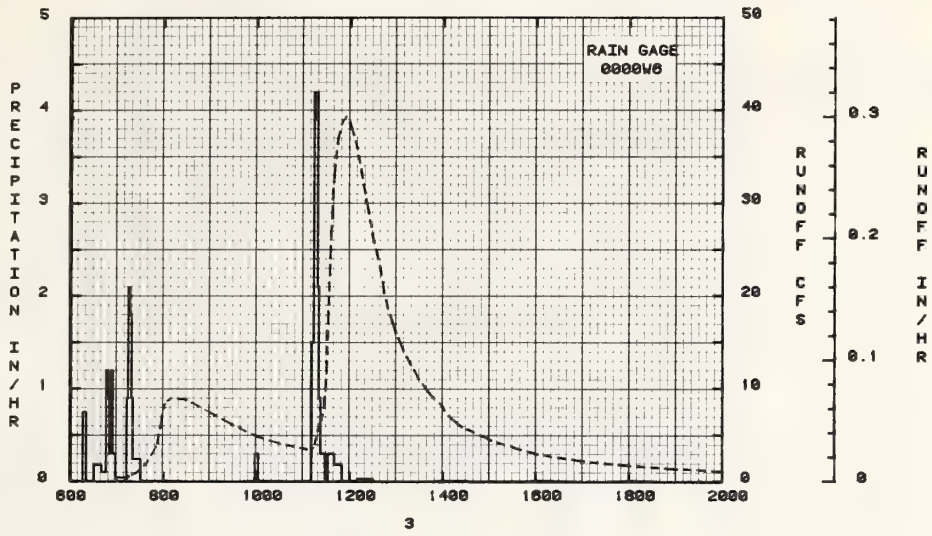
NOTES: To convert mean daily discharge in CFS to IN/DAY, multiply by 0.183090. Records began July 1937. STA AV based on 33 yr period.

1970			SELECTED RUNOFF EVENT			RIESEL (WACO), TEXAS			WATERSHED W-2		
ANTECEDENT CONDITIONS			RAINFALL			RUNOFF					
Date	Painfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.	
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)	
EVENT OF MARCH 3, 1970											
RG 0000W6			RG 0000W6								
3- 3	0.0	0.014	3- 3	616	0.0	0.0	3- 3	700	0.365	0.0	
				620	0.7500	0.05		710	0.432	0.0005	
				630	0.0	0.05		713	0.485	0.0007	
				640	0.1800	0.08		715	0.570	0.0008	
				646	0.1000	0.09		720	0.721	0.0012	
WATERSHRD CONDITIONS:				648	1.2000	0.13		725	0.940	0.0017	
18% fall planted oats, 8 to				650	0.9000	0.16		727	1.096	0.0020	
10 inches high; 20% tilled but				652	0.3000	0.17		730	1.338	0.0025	
not planted; 56% pasture,				654	1.2000	0.21		735	1.714	0.0035	
Bermudagrass, good cover,				658	0.3000	0.23		740	2.246	0.0048	
moderately grazed; 5% gravel											
roads; 1% Johnsongrass, not				712	0.0	0.23		745	2.966	0.0065	
tilled or grazed. Cropland				714	0.9000	0.26		750	3.743	0.0086	
farmed on contour, not				716	2.1000	0.33		752	4.161	0.0096	
terraced.				718	1.8000	0.39		754	5.044	0.0108	
				720	0.9000	0.42		756	6.104	0.0122	
				730	0.2400	0.46		758	7.105	0.0139	
				958	0.0	0.46		800	7.959	0.0158	
				1002	0.3000	0.48		802	8.387	0.0179	
				1111	0.0	0.48		805	8.719	0.0212	
				1113	1.5000	0.53		810	9.003	0.0268	
				1114	4.2001	0.60		830	8.803	0.0495	
				1116	3.9000	0.73		900	7.398	0.0804	
				1118	4.2000	0.87		930	6.061	0.1061	
				1120	2.1000	0.94		1000	4.861	0.1269	
				1122	0.9000	0.97		1030	4.065	0.1439	
				1128	0.3000	1.00		1100	3.540	0.1584	
				1132	0.0	1.00		1105	3.413	0.1606	
				1140	0.3000	1.04		1110	3.413	0.1628	
				1150	0.1800	1.07		1113	3.626	0.1641	
				1210	0.0	1.07		1115	4.049	0.1651	
				1230	0.0300	1.08		1117	4.682	0.1662	
								1119	5.525	0.1675	
								1121	6.147	0.1690	
								1123	6.590	0.1706	
								1125	7.177	0.1723	

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.017629.

1970	SELECTED RUNOFF EVENT			RIESEL (WACO), TEXAS WATERSHED W-2						
ANTECEDENT CONDITIONS			RAINFALL			RUNOFF				
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)
EVENT OF MARCH 3, 1970 (CONTINUED)										
							3- 3	1127	8.332	0.1743
								1129	10.178	0.1766
								1130	12.243	0.1780
								1131	15.542	0.1798
								1132	18.389	0.1819
								1133	21.478	0.1844
								1134	23.360	0.1873
								1135	25.371	0.1904
								1136	27.588	0.1938
								1137	29.724	0.1974
								1138	31.536	0.2013
								1139	32.843	0.2054
								1140	34.170	0.2096
								1142	35.676	0.2185
								1144	37.044	0.2277
								1149	38.760	0.2518
								1154	39.338	0.2766
								1159	38.677	0.3014
								1204	37.368	0.3256
								1209	35.836	0.3488
								1214	33.465	0.3708
								1219	31.079	0.3914
								1224	28.907	0.4104
								1229	26.435	0.4280
								1234	24.671	0.4443
								1239	22.952	0.4594
								1244	20.299	0.4731
								1249	18.640	0.4855
								1254	17.339	0.4969
								1259	16.132	0.5075
								1309	14.100	0.5267
								1319	12.548	0.5436
								1329	11.064	0.5586
								1339	9.898	0.5719
								1349	8.876	0.5838
								1359	8.172	0.5946
								1402	7.624	0.5976
								1412	6.700	0.6067
								1425	5.861	0.6171
								1432	5.585	0.6222
								1502	4.407	0.6413
								1532	3.597	0.6566
								1602	2.880	0.6690
								1702	2.117	0.6881
								1802	1.625	0.7024
								1902	1.297	0.7135
								2002	1.044	0.7224
								2102	0.894	0.7298
								2202	0.831	0.7364
								2302	0.752	0.7424
								2400	0.661	0.7476

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.007629.



EVENT OF MARCH 3, 1970
 RIESEL (WACO), TEXAS WATERSHED W-2

AREA: 42.30 acres

NOTES: Watershed conditions: 31% row grain sorghum; 43% fall planted small grain, largely oats; 15% pasture; 7% grazed and paved road; 4% other. All of other land use is non-tilled, non-pastured land, generally in various crop acreage reduction programs. Cropland farmed on contour, not terraced. Modified conservation program since 1956. For map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1963, USDA Misc. Pub. 1164, p. 42.7-5 (Revised). Precipitation and runoff records began May 1939; station not in operation July 1943 to Jan. 1, 1946; part-year amounts not included in averages. Precipitation data from Thiessen weighted method using rain gages W-2, W-4, and W-5A. For long-time precipitation records, see National Weather Service records at Waco, Texas.

NOTES: For daily air temperatures in the vicinity, see table for Watershed C, p. 42,002-1. Precipitation values are Thiessen weighted average of rain gages W-2, W-4, and W-5A. Records began May 1939; station not in operation 3July 1943 to Jan. 1, 1946; part-year amounts not included in averages. STA AV based on 28 yr period. Estimate codes may indicate that non-significant event totals are included.

1970 MEAN DAILY DISCHARGE (cfs)													RIESEL (WACO), TEXAS WATERSHED W-6	
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
1	0.001	0.191	0.120	0.013	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
2	0.002	0.001	0.048	0.008	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
3	0.001	0.001	1.214	0.003	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
4	0.001	0.001	0.085	0.002	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
5	0.037	0.001	0.034	0.002	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
6	0.002	0.005	0.873	0.003	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
7	0.002	0.003	2.466	0.003	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
8	0.002	0.003	0.176	0.003	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
9	0.002	0.002	0.038	0.410	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
10	0.002	0.002	0.016	0.091	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
11	0.001	0.003	0.023	0.006	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
12	0.001	0.003	0.016	0.006	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
13	0.002	0.002	0.011	0.006	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
14	0.002	0.003	0.010	0.006	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
15	0.002	0.006	0.010	0.006	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
16	0.001	0.002	0.019	0.006	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
17	0.001	0.003	0.117	0.005	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
18	0.001	0.002	0.015	0.006	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
19	0.001	0.001	0.014	0.005	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
20	0.001	0.002	0.018	0.002	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
21	0.001	0.003	0.066	0.003	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
22	0.001	0.004	0.017	0.003	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
23	0.001	0.006	0.013	0.003	0.0	0.0	0.0	0.0	0.0	0.011	0.0	0.0		
24	0.0	0.954	0.012	0.003	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
25	0.0	0.049	0.010	0.002	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
26	0.0	0.010	0.011	0.001	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
27	0.0	0.018	0.014	0.001	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
28	0.0	0.064	0.013	0.001	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
29	0.0		0.012	0.001	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
30	0.0		0.015	0.001	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
31	0.0		0.016		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
MEAN	0.0023	0.0481	0.1782	0.0204	0.0	0.0	0.0	0.0	0.0	0.0004	0.0	0.0		
INCHES	0.039	0.758	3.108	0.345	0.000	0.000	0.0	0.0	0.0	0.006	0.0	0.0		
STA AV	0.326	0.414	0.558	0.745	0.807	0.476	0.070	0.027	0.089	0.110	0.288	0.322		

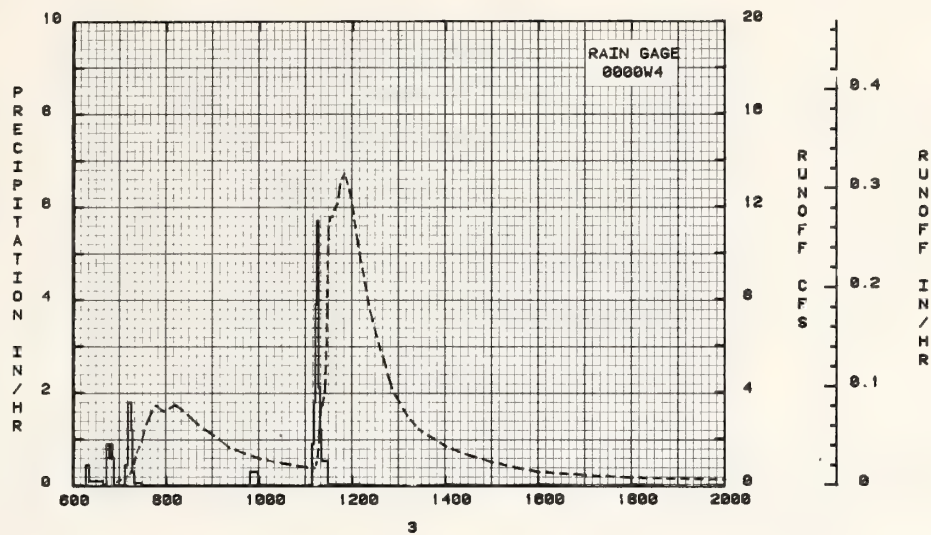
NOTES: To convert mean daily discharge in CFS to IN/DAY, multiply by 0.562687. Records began May 1939; station not in operation July 1943 to Jan. 1, 1946; part-year amounts not included in averages. STA AV based on 28 yr period.

1970 SELECTED RUNOFF EVENT						RIESEL (WACO), TEXAS WATERSHED W-6					
ANTECEDENT CONDITIONS			RAINFALL				RUNOFF				
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.	
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)	
EVENT OF MARCH 3, 1970											
RG 0000W4											
3- 3	0.0	0.007	3- 3	616	0.0	0.0	3- 3	656	0.184	0.0	
				620	0.4500	0.03		701	0.273	0.0004	
				638	0.1000	0.06		706	0.347	0.0010	
				642	0.0	0.06		711	0.433	0.0018	
				646	0.9000	0.12		713	0.515	0.0022	
WATERSHED CONDITIONS:											
43% fall planted oats, 8 to 10 inches high; 31% tilled but not planted; 15% pasture, Bermudagrass, good cover, moderately grazed; 7% gravel roads; 4% Johnsongrass and weeds, not tilled or grazed. Cropland farmed on contour, not terraced.											
				648	0.6000	0.14		715	0.676	0.0027	
				650	0.9000	0.17		718	0.978	0.0037	
				652	0.6000	0.19		720	1.219	0.0046	
				706	0.0	0.19		722	1.463	0.0056	
				710	0.4500	0.22		725	1.666	0.0074	
				714	1.8000	0.34		728	1.938	0.0095	
				716	1.2000	0.38		731	2.384	0.0120	
				718	0.3000	0.39		736	2.841	0.0171	
				728	0.0600	0.40		741	3.224	0.0230	
				948	0.0	0.40		746	3.447	0.0295	
				958	0.3000	0.45		756	3.188	0.0425	
				1108	0.0	0.45		811	3.466	0.0620	
				1110	0.9000	0.48		821	3.242	0.0751	
				1112	1.8000	0.54		831	2.925	0.0872	
				1114	3.9001	0.67		841	2.614	0.0980	
				1116	5.6999	0.86		901	2.153	0.1166	
				1118	2.1000	0.93		921	1.643	0.1314	
				1120	1.2000	0.97		941	1.368	0.1432	
				1128	0.5250	1.04		1001	1.144	0.1530	
				1210	0.0143	1.05		1031	0.945	0.1652	
								1101	0.771	0.1753	
								1108	0.729	0.1774	
								1111	0.764	0.1783	
								1113	0.874	0.1789	
								1114	0.995	0.1793	
								1115	1.209	0.1797	
								1116	1.551	0.1802	
								1117	2.085	0.1809	
								1118	2.645	0.1818	
								1119	3.046	0.1829	

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.023445.

1970 SELECTED RUNOFF EVENT			RIESEL (WACO), TEXAS			WATERSHED W-6		
ANTECEDENT CONDITIONS			RAINFALL			RUNOFF		
Date Mo-Day	Rainfall (inches)	Runoff (inches)	Date Mo-Day	Time of Day	Intensity (in/hr)	Acc. (inches)	Date Mo-Day	Time of Day
								Rate (cfs)
								Acc. (inches)
EVENT OF MARCH 3, 1970 (CONTINUED)								
				3- 3			1120	3.447
							1121	3.436
							1123	3.782
							1124	4.019
							1125	4.551
							1126	5.754
							1127	7.833
							1128	9.998
							1129	11.108
							1131	11.546
							1138	11.605
							1137	11.960
							1140	12.140
							1142	12.562
							1144	12.989
							1146	13.236
							1149	13.422
							1151	13.267
							1156	12.683
							1201	11.693
							1206	10.590
							1211	9.610
							1216	8.692
							1221	7.782
							1226	7.057
							1231	6.405
							1236	5.822
							1241	5.371
							1246	4.719
							1251	4.180
							1256	3.840
							1301	3.550
							1306	3.249
							1311	2.994
							1316	2.799
							1321	2.574
							1326	2.407
							1330	2.292
							1346	1.991
							1401	1.654
							1431	1.277
							1501	0.978
							1531	0.743
							1601	0.565
							1701	0.409
							1801	0.310
							2101	0.222
							2400	0.169

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.023445.



RIESEL (WACO), TEXAS WATERSHED W-10

LOCATION: Falls Co., Texas; 19 mi. SE of Waco; Brazos River Basin.

AREA: 19.70 acres

MONTHLY PRECIPITATION AND RUNOFF (inches)														RIESEL (WACO), TEXAS WATERSHED W-10												
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual												
1970	P	0.85	4.54	4.74	2.84	2.34	0.41	0.31	1.32	5.33	3.73	0.40	0.78	27.59												
	Q	0.089	1.669	2.685	0.835	0.000	0.0	0.0	0.0	0.0	0.414	0.0	0.0	5.692												
STA AV	P	2.08	2.73	2.34	4.02	3.84	3.33	1.34	2.30	2.65	2.83	2.88	2.31	32.66												
	Q	0.468	0.536	0.572	0.970	0.904	0.587	0.086	0.089	0.188	0.267	0.453	0.448	5.569												
ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																										
		Maximum Discharge Date		1 Hour Date		2 Hours Date		Maximum Volume for Selected Time Interval 6 Hours Date		12 Hours Date		1 Day Date		2 Days Date		8 Days Date										
		Rate		Vol.		Vol.		Vol.		Vol.		Vol.		Vol.		Vol.										
1970		2-24	0.395	2-24	0.348	2-24	0.580	3- 7	0.888	2-24	1.021	3- 6	1.728	3- 6	1.779	2-28	2.570									
MAXIMUMS FOR PERIOD OF RECORD																										
		6-10	5.010	4-19	2.310	4-19	2.550	5-11	3.000	11-22	3.330	11-22	3.530	4-24	5.160	5-19	8.290									
		1941		1957		1957		1957		1940		1940		1966		1957										

NOTES: Watershed conditions: 100% Coastal Bermudagrass for pasture. Good cover, moderately grazed, terraced. For map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1963, USDA Misc. Pub. 1164, p. 42.7-5 (Revised). Precipitation and runoff records began Aug. 1938; station not in operation July 1943 to May 3, 1946; part-year amounts not included in averages. Precipitation data obtained from rain gage W-6. For long-time precipitation records, see National Weather Service records at Waco, Texas.

1970 DAILY PRECIPITATION (inches)														RIESEL (WACO), TEXAS WATERSHED W-10											
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec													
1	0.0	1.36	0.22	0.02E	0.0	0.41	0.0	0.0	0.79	0.0	0.07E	0.0													
2	0.0	0.0	0.05E	0.0	0.0	0.0	0.0	0.0	0.38	0.0	0.0	0.0													
3	0.05E	0.0	1.08	0.0	0.0	0.0	0.0	0.14	0.0	0.0	0.0	0.0													
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.07E	0.0	0.0	0.0	0.0													
5	0.70	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0													
6	0.0	0.29	1.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0													
7	0.0	0.0	1.19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0													
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.22	0.0	0.0													
9	0.0	0.0	0.0	2.16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0													
10	0.07E	0.0	0.0	0.04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0													
11	0.0	0.0	0.16	0.0	0.0	0.0	0.0	0.15	0.0	1.49	0.0	0.0													
12	0.0	0.0	0.0	0.0	0.02E	0.0	0.0	0.0	0.0	0.06	0.0	0.0													
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.27	0.0	0.33	0.0													
14	0.03E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0													
15	0.0	0.34	0.0	0.0	0.05E	0.0	0.0	0.0	0.0	0.0	0.0	0.12													
16	0.0	0.0	0.45	0.03E	0.0	0.0	0.0	0.0	1.14	0.0	0.0	0.0													
17	0.0	0.0	0.14	0.0	0.0	0.0	0.0	0.0	0.09	0.0	0.0	0.0													
18	0.0	0.0	0.0	0.29	0.0	0.0	0.0	0.0	0.0	0.21	0.0	0.0													
19	0.0	0.0	0.03E	0.13	0.0	0.0	0.0	0.0	0.0	0.06	0.0	0.03E													
20	0.0	0.0	0.24	0.0	0.0	0.0	0.0	0.0	0.08E	0.0	0.0	0.11E													
21	0.0	0.0	0.14	0.0	0.0	0.0	0.08E	0.0	0.16	0.0	0.0	0.07E													
22	0.0	0.0	0.0	0.0	0.37	0.0	0.0	0.0	0.0	0.0	0.0	0.0													
23	0.0	0.25	0.0	0.0	0.03E	0.0	0.0	0.0	0.58	1.69	0.0	0.0													
24	0.0	1.78	0.0	0.0	0.13	0.0	0.23	0.0	0.0	0.0	0.0	0.0													
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.26	0.0	0.0	0.0													
26	0.0	0.0	0.0	0.0	0.40	0.0	0.0	0.0	0.58	0.0	0.0	0.0													
27	0.0	0.38	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0													
28	0.0	0.14	0.04E	0.0	0.76	0.0	0.0	0.0	0.0	0.0	0.0	0.0													
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.96	0.0	0.0	0.0	0.0													
30	0.0	0.0	0.0	0.17	0.58	0.0	0.0	0.0	0.0	0.0	0.0	0.45													
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0													
TOTAL	0.85	4.54	4.74	2.84	2.34	0.41	0.31	1.32	5.33	3.73	0.40	0.78													
STA AV	2.08	2.73	2.34	4.02	3.84	3.33	1.34	2.30	2.65	2.83	2.88	2.31													

NOTES: For daily air temperatures in the vicinity, see table for Watershed C, p. 42.002-1. Precipitation values are from rain gage W-6. Records began Aug. 1938; station not in operation July 1943 to May 3, 1946; part-year amounts not included in averages. STA AV based on 28 yr period. Estimate codes may indicate that non-significant event totals are included.

1970 MEAN DAILY DISCHARGE (cfs) RIESEL (WACO), TEXAS WATERSHED W-10												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.0	0.441	0.031	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	0.0	0.002	0.009	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3	0.0	0.0	0.603	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4	0.0	0.0	0.007	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	0.068	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6	0.003	0.0	0.376	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7	0.033	0.0	1.078	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8	0.0	0.0	0.020	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9	0.0	0.0	0.0	0.565	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10	0.0	0.0	0.0	0.126	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0 T	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.001	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.0	0.076	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.0 T	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.020	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0 T	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.343	0.0	0.0
24	0.0	0.879	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.039	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	0.0	0.001	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	0.0	0.018	0.0	0.0	0.0 T	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0
MEAN	0.0324	0.0493	0.0717	0.0230	0.0	0.0	0.0	0.0	0.0	0.0111	0.0	0.0
INCHES	0.089	1.669	2.685	0.835	0.009	0.0	0.0	0.0	0.0	0.414	0.0	0.0
STA AV	0.468	0.536	0.572	0.970	0.904	0.587	0.086	0.089	0.188	0.267	0.453	0.448

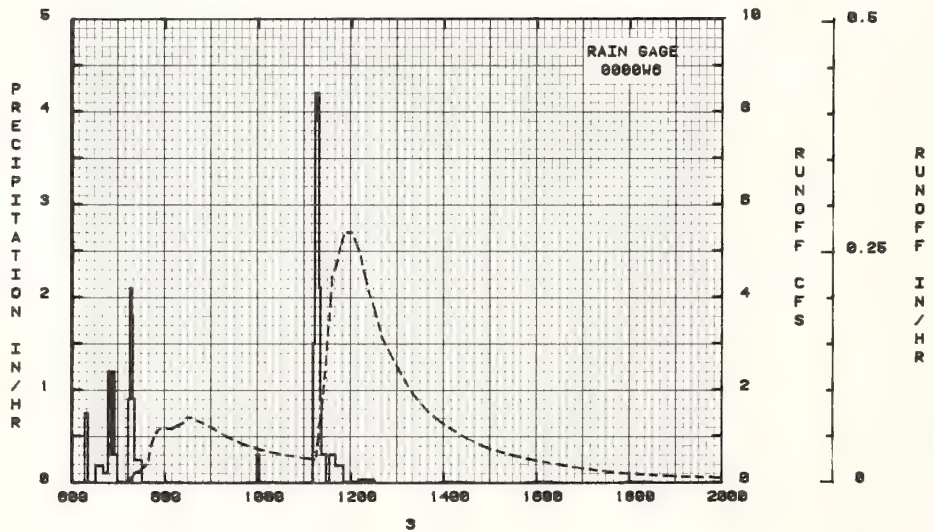
NOTES: To convert mean daily discharge in CFS to IN/DAY, multiply by 1.208206. Records began Aug. 1938; station not in operation July 1943 to May 3, 1946; part-year amounts not included in averages. STA AV based on 28 yr period.

1970 SELECTED RUNOFF EVENT RIESEL (WACO), TEXAS WATERSHED W-10												
ANTECEDENT CONDITIONS			RAINFALL				RUNOFF					
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.		
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)		
EVENT OF MARCH 3, 1970												
EG 0000W6			EG 0000W6									
3- 3	0.0	0.001	3- 3	616	0.0	0.0	3- 3	703	0.006	0.0		
				620	0.7500	0.05		705	0.010	0.0		
				630	0.0	0.05		710	0.015	0.0001		
				640	0.1800	0.08		713	0.023	0.0001		
				646	0.1000	0.09		715	0.038	0.0002		
WATERSHED CONDITIONS: 100% Coastal Bermudagrass pasture, 4 inches high, good cover; dormant.												
				648	1.2000	0.13		716	0.054	0.0002		
				650	0.9000	0.16		717	0.090	0.0003		
				652	0.3000	0.17		718	0.129	0.0004		
				654	1.2000	0.21		720	0.186	0.0007		
				658	0.3000	0.23		723	0.230	0.0012		
				712	0.0	0.23		726	0.230	0.0018		
				714	0.9000	0.26		729	0.284	0.0024		
				716	2.1000	0.33		732	0.326	0.0032		
				718	1.8000	0.39		735	0.381	0.0041		
				720	0.9000	0.42		738	0.504	0.0052		
				730	0.2400	0.46		740	0.625	0.0061		
				958	0.0	0.46		742	0.814	0.0073		
				1002	0.3000	0.48		745	0.953	0.0095		
				1111	0.0	0.48		748	1.081	0.0120		
				1113	1.5000	0.53		753	1.162	0.0167		
				1114	4.2001	0.60		808	1.162	0.0313		
				1116	3.9000	0.73		823	1.287	0.0467		
				1118	4.2000	0.87		826	1.399	0.0523		
				1120	2.1000	0.94		833	1.399	0.0562		
				1122	0.9000	0.97		858	1.200	0.0855		
				1128	0.3000	1.00		918	1.003	0.1040		
				1132	0.0	1.00		938	0.844	0.1195		
				1140	0.3000	1.04		958	0.722	0.1326		
				1150	0.1800	1.07		1028	0.613	0.1494		
				1210	0.0	1.07		1100	0.520	0.1646		
				1230	0.0300	1.08		1113	0.493	0.1701		
								1115	0.571	0.1710		
								1116	0.682	0.1715		
								1117	0.851	0.1721		
								1118	1.037	0.1729		

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.050342.

1970	SELECTED RUNOFF EVENT						RIESEL (WACO), TEXAS WATERSHED W-10				
ANTECEDENT CONDITIONS			RAINFALL				RUNOFF				
Date Mo-Day	Rainfall (inches)	Runoff (inches)	Date Mo-Day	Time of Day	Intensity (in/hr)	Acc. (inches)	Date Mo-Day	Time of Day	Rate (cfs)	Acc. (inches)	
EVENT OF MARCH 3, 1970 (CONTINUED)											
							3- 3	1119	1.219	0.1739	
								1121	1.442	0.1761	
								1123	1.774	0.1788	
								1125	2.085	0.1820	
								1127	2.566	0.1859	
								1129	3.029	0.1906	
								1131	3.353	0.1960	
								1133	3.942	0.2021	
								1135	4.437	0.2092	
								1140	4.665	0.2283	
								1145	5.044	0.2487	
								1150	5.316	0.2704	
								1155	5.392	0.2928	
								1200	5.392	0.3155	
								1210	4.996	0.3590	
								1220	4.282	0.3979	
								1230	3.719	0.4315	
								1240	3.116	0.4601	
								1250	2.791	0.4849	
								1300	2.474	0.5070	
								1320	1.900	0.5437	
								1340	1.518	0.5724	
								1400	1.248	0.5956	
								1430	0.945	0.6232	
								1500	0.709	0.6440	
								1530	0.571	0.6601	
								1600	0.462	0.6731	
								1630	0.373	0.6836	
								1700	0.288	0.6919	
								1730	0.222	0.6983	
								1800	0.176	0.7033	
								1900	0.116	0.7106	
								2000	0.089	0.7158	
								2100	0.066	0.7197	
								2200	0.053	0.7227	
								2300	0.043	0.7251	
								2400	0.034	0.7270	

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.050342.



EVENT OF MARCH 3, 1970
RIESEL (WACO), TEXAS WATERSHED W-10

RIESEL (WACO), TEXAS WATERSHED Y

LOCATION: Falls Co., Texas; 17 mi. SE Waco; Brazos Basin.

AREA: 309.00 acres

MONTHLY PRECIPITATION AND RUNOFF (inches)										RIESEL (WACO), TEXAS WATERSHED Y							
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual			
1970	P	0.82	4.71	4.79	2.65	2.24	0.23	0.51	0.86	5.80	3.36	0.34	0.64	27.15			
	Q	0.107	1.320	3.044	0.610	0.006	0.011	0.0	0.0	0.003	0.011	0.0	0.0	5.103			
STA AV	P	2.17	2.70	2.38	3.92	3.87	3.46	1.45	2.03	2.58	2.66	2.75	2.32	32.31			
	Q	0.496	0.560	0.593	0.792	0.734	0.560	0.119	0.044	0.099	0.091	0.308	0.319	4.714			
ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																	
		Maximum Discharge		1 Hour		2 Hours		Maximum Volume for Selected Time Interval				1 Day		2 Days		8 Days	
		Date	Rate	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.
1970	J	2-24	0.232	2-24	0.211	2-24	0.363	3- 7	0.785	3- 7	0.955	3- 6	1.602	3- 6	1.731	2-28	2.558
MAXIMUMS FOR PERIOD OF RECORD																	
		4-19	2.540	4-19	2.150	4-19	2.740	4-19	3.480	4-19	3.660	3-29	3.980	11-22	4.770	4-19	9.360
		1957		1957		1957		1957		1957		1965		1940		1957	

NOTES: Watershed conditions: 50% pasture; 11% cotton; 20% fall planted small grain, largely oats; 18% row grain sorghum; 1% gravel and paved roads. Cropland terraced, contour cultivation. No change in conservation practices. For map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1964, USDA Misc. Pub. 1194, p. 42.11-5 (Revised). Precipitation and runoff records began May 1937; station not in operation July 1943 to May 1, 1946; part-year amounts not included in averages. Precipitation data from Thiessen weighted method using rain gages 69, 69B, 70, 75A, 84A, 89, and W-2A. For long-time precipitation records, see National Weather Service records at Waco, Texas.

1970 DAILY PRECIPITATION (inches)														RIESEL (WACO), TEXAS WATERSHED Y	
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec			
1	0.0	1.37	0.31	0.02E	0.03E	0.23E	0.0	0.0	0.82	0.0	0.05E	0.0			
2	0.0	0.0	0.07E	0.0	0.0	0.0	0.0	0.00E	0.33	0.0	0.0	0.0			
3	0.07E	0.0	0.76	0.0	0.0	0.0	0.0	0.03E	0.0	0.0	0.0	0.0			
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E	0.0	0.0	0.0	0.0			
5	0.68	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
6	0.0	0.29	1.12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
7	0.0	0.0	1.18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.20	0.0	0.0			
9	0.0	0.0	0.0	2.08	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
10	0.04E	0.01E	0.0	0.06	0.0	0.0	0.0	0.0	0.03E	0.0	0.0	0.0			
11	0.0	0.0	0.25	0.0	0.0	0.0	0.0	0.07E	0.0	0.91	0.0	0.0			
12	0.0	0.0	0.0	0.0	0.02E	0.0	0.0	0.0	0.03E	0.04	0.0	0.0			
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.20	0.0	0.29	0.0			
14	0.03E	0.01E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
15	0.0	0.37	0.0	0.0	0.05E	0.0	0.0	0.0	0.0	0.0	0.0	0.13E			
16	0.0	0.0	0.37	0.03E	0.0	0.0	0.0	0.0	1.64	0.0	0.0	0.0			
17	0.0	0.0	0.17	0.0	0.0	0.0	0.0	0.0	0.12	0.0	0.0	0.0			
18	0.0	0.0	0.0	0.27	0.0	0.0	0.0	0.0	0.0	0.21	0.0	0.0			
19	0.0	0.0	0.04E	0.12	0.0	0.0	0.0	0.0	0.0	0.08	0.0	0.03E			
20	0.0	0.0	0.26	0.0	0.0	0.0	0.0	0.0	0.03E	0.0	0.0	0.11E			
21	0.0	0.0	0.18	0.0	0.0	0.0	0.09E	0.0	0.11E	0.0	0.0	0.05E			
22	0.0	0.0	0.0	0.0	0.17	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
23	0.0	0.27	0.0	0.0	0.02E	0.0	0.0	0.00E	0.50	1.92	0.0	0.0			
24	0.0	1.84	0.0	0.0	0.09E	0.0	0.42E	0.0	0.0	0.0	0.0	0.0			
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.39	0.0	0.0	0.0			
26	0.0	0.0	0.0	0.0	0.23	0.0	0.0	0.0	0.59	0.0	0.0	0.0			
27	0.0	0.38	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
28	0.0	0.16	0.04E	0.0	0.88	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.73	0.0	0.0	0.0	0.0			
30	0.0	0.0	0.0	0.07E	0.76	0.0	0.0	0.02	0.0	0.0	0.0	0.52			
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
TOTAL		0.82	4.71	4.79	2.65	2.24	0.23	0.51	5.80	3.36	0.34	0.84			
STA AV		2.17	2.70	2.38	3.92	3.87	3.46	1.45	2.03	2.58	2.66	2.75			

NOTES: For daily air temperatures in the vicinity, see table for Watershed C, p. 42.002-1. Precipitation values are Thiessen weighted average of rain gages 69, 69B, 70, 75A, 84A, 89, and W-2A. Records began May 1937; station not in operation July 1943 to May 1, 1946; part-year amounts not included in averages. STA AV based on 29 yr period. Estimate codes may indicate that non-significant event totals are included.

1970 MEAN DAILY DISCHARGE (cfs) RIESEL (WACO), TEXAS WATERSHED Y												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.029	2.669	2.012	0.057	0.011	0.013	0.0	0.0	0.0	0.0	0.0	0.0
2	0.030	0.145	1.009	0.030	0.004	0.003	0.0	0.0	0.0	0.0	0.0	0.0
3	0.024	0.043	6.741	0.022	0.001	0.001	0.0	0.0	0.0	0.0	0.0	0.0
4	0.020	0.035	0.656	0.020	0.0	0.001	0.0	0.0	0.0	0.0	0.0	0.0
5	0.577	0.033	0.274	0.016	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6	0.079	0.143	5.152	0.016	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7	0.034	0.096	16.397	0.012	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8	0.030	0.071	1.206	0.010	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9	0.026	0.043	0.332	4.194	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10	0.037	0.030	0.209	2.733	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11	0.052	0.026	0.396	0.195	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	0.031	0.023	0.270	0.082	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13	0.028	0.028	0.155	0.037	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	0.032	0.029	0.118	0.026	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.030	0.163	0.099	0.035	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.028	0.056	0.109	0.043	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.027	0.033	1.481	0.049	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	0.022	0.028	0.223	0.047	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	0.021	0.016	0.238	0.148	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.023	0.013	0.217	0.023	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	0.021	0.017	1.396	0.014	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.022	0.026	0.286	0.013	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	0.023	0.064	0.139	0.013	0.0	0.0	0.0	0.0	0.0	0.142	0.0	0.0
24	0.022	9.962	0.079	0.017	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.022	1.283	0.056	0.019	0.0	0.0	0.0	0.0	0.030	0.0	0.0	0.0
26	0.018	0.197	0.038	0.013	0.0	0.0	0.0	0.0	0.003	0.0	0.0	0.0
27	0.022	0.282	0.041	0.010	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	0.020	1.587	0.048	0.010	0.012	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	0.013	0.041	1.039	0.001	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	0.008	0.052	0.011	0.029	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	0.013	0.050		0.023		0.0	0.0	0.0	0.0	0.0	0.0	0.0
MEAN	0.0446	0.6122	1.2749	0.2641	0.0027	0.0006	0.0	0.0	0.0011	0.0046	0.0	0.0
INCHES	0.107	1.320	3.044	0.610	0.006	0.001	0.0	0.0	0.003	0.011	0.0	0.0
STA AV	0.496	0.560	0.593	0.792	0.006	0.001	0.119	0.044	0.099	0.091	0.308	0.319

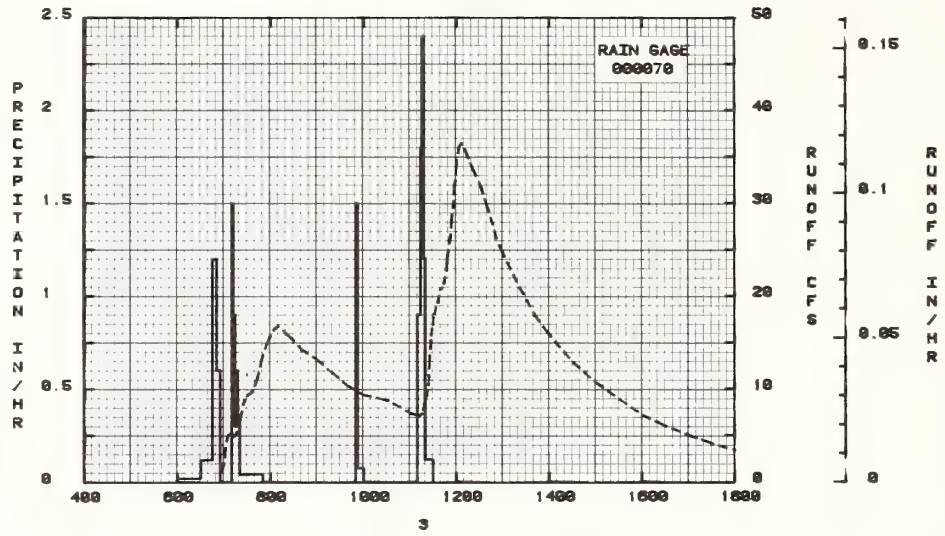
NOTES: To convert mean daily discharge in CFS to IN/DAY, multiply by 0.077028. Records began May 1937; station not in operation July 1943 to May 1, 1946; part-year amounts not included in averages. STA AV based on 29 yr period.

1970 SELECTED RUNOFF EVENT RIESEL (WACO), TEXAS WATERSHED Y												
ANTECEDENT CONDITIONS			RAINFALL									
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Runoff	Rate	Acc.	
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)		(inches)	
EVENT OF MARCH 3, 1970												
EG 000070												
3- 3	0.0	0.020	3- 3	600	0.0	0.0	3- 3	655	1.210	0.0		
				630	0.0200	0.01		656	1.490	0.0002		
				645	0.1200	0.04		659	1.770	0.0003		
				650	1.2000	0.14		700	2.080	0.0004		
				655	0.6000	0.19		701	2.710	0.0005		
WATERSHED CONDITIONS:												
50% pasture, Bermudagrass												
and native grass, good												
cover, moderately grazed;												
20% fall planted oats, 8 to												
10 inches high; 29% tilled,												
bare; 1% gravel roads.												
Cropland terraced, cultivated												
on contour.												
				720	0.3000	0.31		715	5.110	0.0040		
				750	0.0400	0.33		717	5.410	0.0046		
				950	0.0	0.33		720	6.320	0.0055		
				952	1.5000	0.38		723	7.620	0.0066		
				1000	0.0750	0.39		725	8.470	0.0075		
				1110	0.0	0.39		727	8.880	0.0084		
				1114	0.9000	0.45		730	9.320	0.0099		
				1116	1.8000	0.51		732	9.520	0.0109		
				1118	2.4000	0.59		734	9.580	0.0119		
				1120	1.2000	0.63		736	9.700	0.0129		
				1130	0.1200	0.65		740	10.480	0.0151		
								745	11.740	0.0181		
								750	13.710	0.0215		
								755	14.880	0.0253		
								800	15.740	0.0294		
								805	16.550	0.0337		
								810	16.810	0.0382		
								820	16.030	0.0470		
								830	15.200	0.0554		
								840	14.280	0.0633		
								900	13.150	0.0780		
								920	11.740	0.0913		
								940	10.300	0.1031		
								1000	9.380	0.1136		
								1032	8.770	0.1291		

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.003210.

1970	SELECTED RUNOFF EVENT					RIESEL (WACO), TEXAS WATERSHED Y				
ANTECEDENT CONDITIONS			RAINFALL			RUNOFF				
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)
EVENT OF MARCH 3, 1970 (CONTINUED)										
							3- 3	1102	7.370	0.1420
								1112	7.130	0.1459
								1114	7.240	0.1467
								1116	7.340	0.1475
								1118	7.790	0.1483
								1119	8.440	0.1487
								1120	8.790	0.1492
								1121	8.990	0.1497
								1122	9.350	0.1502
								1123	9.850	0.1507
								1124	10.480	0.1512
								1125	11.510	0.1518
								1126	13.630	0.1525
								1127	15.280	0.1533
								1128	15.820	0.1541
								1129	16.460	0.1550
								1130	16.940	0.1559
								1131	17.700	0.1568
								1132	18.070	0.1578
								1134	18.770	0.1598
								1136	19.350	0.1618
								1138	19.990	0.1639
								1140	20.750	0.1661
								1142	20.900	0.1683
								1144	21.370	0.1706
								1146	22.000	0.1729
								1148	23.480	0.1753
								1150	24.920	0.1779
								1152	25.930	0.1806
								1155	28.750	0.1850
								1158	31.710	0.1899
								1201	34.680	0.1952
								1204	36.120	0.2009
								1207	36.430	0.2067
								1212	35.580	0.2163
								1222	33.640	0.2348
								1232	31.780	0.2523
								1242	29.140	0.2686
								1252	26.170	0.2834
								1302	24.280	0.2969
								1322	20.850	0.3210
								1342	17.890	0.3417
								1402	15.650	0.3596
								1432	12.750	0.3824
								1502	10.580	0.4011
								1532	8.820	0.4167
								1602	7.100	0.4295
								1632	5.960	0.4400
								1702	4.970	0.4488
								1732	4.070	0.4561
								1802	3.430	0.4621
								1832	2.840	0.4671
								1902	2.500	0.4714
								2002	2.080	0.4787
								2102	1.770	0.4849
								2202	1.560	0.4902
								2302	1.390	0.4949
								2400	1.280	0.4991

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.003210.



RIESEL (WACO), TEXAS WATERSHED Y-2

LOCATION: Falls Co., Texas; 18 mi. SE Waco; Brazos River Basin.

AREA: 132.00 acres

MONTHLY PRECIPITATION AND RUNOFF (inches)								RIESEL (WACO), TEXAS WATERSHED Y-2							
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual	
1970	P	0.81	4.69	4.82	2.65	2.23	0.21	0.46	0.88	5.89	3.37	0.33	0.84	27.18	
	Q	0.033	1.035	2.850	0.451	0.000	0.0	0.0	0.0	0.0	0.002	0.0	0.0	4.372	
STA AV	P	2.18	2.72	2.63	3.98	4.36	3.39	1.52	2.05	2.69	2.64	2.92	2.47	33.54	
	Q	0.441	0.598	0.740	0.921	1.102	0.567	0.123	0.045	0.091	0.110	0.327	0.431	5.496	
ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS															
		Maximum Discharge		1 Hour		2 Hours		Maximum Volume for Selected Time Interval							
		Date	Rate	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.
1970		2-24	0.253	2-24	0.225	3- 7	0.390	3- 7	0.852	3- 7	1.004	3- 6	1.649	3- 6	1.766
		2-24		0.225		3- 7		0.390		3- 7		1.004		3- 6	
MAXIMUMS FOR PERIOD OF RECORD															
		5- 1	4.070	5- 1	3.110	5- 1	5.470	5- 1	7.080	5- 1	7.280	5- 1	7.460	4-30	9.640
		1944		1944		1944		1944		1944		1944		1944	

NOTES: Watershed conditions: 19% cotton; 28% fall planted small grain, largely oats; 19% row grain sorghum; 33% pasture; 1% gravel and paved roads. Cropland terraced, contour cultivation, conservation treatment since 1942. For map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1964, USDA Misc. Pub. 1194, p. 42.11-5 (Revised). Precipitation and runoff records began Jan. 1, 1939. Precipitation data from Thiessen weighted method using rain gages 69, 69B, 70, 75A, and 84A. For long-time precipitation records, see National Weather Service records at Waco, Texas.

1970	DAILY PRECIPITATION (inches)												RIESEL (WACO), TEXAS WATERSHED Y-2	
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
1	0.0	1.34	0.32	0.01E	0.01E	0.21E	0.0	0.0	0.82	0.0	0.05E	0.0		
2	0.0	0.0	0.08E	0.0	0.0	0.0	0.0	0.00E	0.33	0.0	0.0	0.0		
3	0.07E	0.0	0.74	0.0	0.0	0.0	0.0	0.02E	0.0	0.0	0.0	0.0		
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.01E	0.0	0.0	0.0	0.0		
5	0.68	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
6	0.0	0.29	1.12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
7	0.0	0.0	1.19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.23	0.0	0.0		
9	0.0	0.0	0.0	2.08	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
10	0.03E	0.02E	0.0	0.06	0.0	0.0	0.0	0.0	0.03E	0.0	0.0	0.0		
11	0.0	0.0	0.31	0.0	0.0	0.0	0.0	0.07E	0.0	0.88	0.0	0.0		
12	0.0	0.0	0.0	0.0	0.02E	0.0	0.0 E	0.0	0.04E	0.03	0.0	0.0		
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.21	0.0	0.28	0.0		
14	0.03E	0.01E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
15	0.0	0.35	0.0	0.0	0.04E	0.0	0.0	0.0	0.0	0.0	0.0	0.14E		
16	0.0	0.0	0.36	0.03E	0.0	0.0	0.0	0.0	1.70	0.0	0.0	0.0		
17	0.0	0.0	0.17	0.0	0.0	0.0	0.0	0.0	0.13	0.0	0.0	0.0		
18	0.0 S	0.0	0.0	0.28	0.0	0.0	0.0	0.0	0.0	0.21	0.0	0.0		
19	0.0	0.0	0.04E	0.12	0.0	0.0	0.0	0.0	0.0	0.07	0.0	0.04E		
20	0.0	0.0	0.27	0.0	0.0	0.0	0.0	0.0	0.02E	0.0	0.0	0.10E		
21	0.0	0.0	0.18	0.0	0.0	0.0	0.0	0.12	0.0	0.11E	0.0	0.0		
22	0.0	0.0	0.0	0.0	0.17	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
23	0.0	0.27	0.0	0.0	0.01E	0.0	0.0	0.00E	0.50	1.95	0.0	0.0		
24	0.0	1.85	0.0	0.0	0.08E	0.0	0.34	0.0	0.0	0.0	0.0	0.0		
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.41	0.0	0.0	0.0		
26	0.0	0.0	0.0	0.0	0.24	0.0	0.0	0.0	0.59	0.0	0.0	0.0		
27	0.0	0.40	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
28	0.0	0.17	0.04E	0.0	0.89	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.75	0.0	0.0	0.0	0.0		
30	0.0	0.0	0.0	0.07E	0.77	0.0	0.0	0.02	0.0	0.0	0.0	0.0		
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
TOTAL	0.81	4.69	4.82	2.65	2.23	0.21	0.46	0.88	5.89	3.37	0.33	0.84		
STA AV	2.18	2.72	2.63	3.98	4.36	3.39	1.52	2.05	2.69	2.64	2.92	2.47		

NOTES: For daily air temperatures in the vicinity, see table for Watershed C, p. 42.002-1. Precipitation values are Thiessen weighted average of rain gages 69, 69B, 70, 75A, and 84A. Records began Jan. 1, 1939. STA AV based on 32 yr period. Estimate codes may indicate that non-significant event totals are included.

1970 MEAN DAILY DISCHARGE (cfs) BIESEL (WACO), TEXAS WATERSHED Y-2												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.0	0.833	0.777	0.004	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	0.0	0.017	0.398	0.0 T	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3	0.0	0.0 T	2.837	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4	0.0	0.0	0.204	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	0.174	0.0	0.073	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6	0.011	0.023	2.302	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7	0.0	0.013	7.109	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8	0.0	0.005	0.460	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9	0.0	0.0 T	0.087	1.638	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10	0.0	0.0	0.041	0.786	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11	0.001	0.0	0.121	0.034	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	0.0	0.0	0.064	0.003	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13	0.0	0.0	0.032	0.0 T	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	0.0	0.0	0.023	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.023	0.016	0.0	0.0 T	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.002	0.019	0.0 T	0.001	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.0	0.486	0.001	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	0.0	0.0	0.041	0.002	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	0.0	0.0	0.052	0.036	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.067	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.476	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.075	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	0.0	0.004	0.024	0.0	0.0	0.0	0.0	0.0	0.0	0.009	0.0	0.0
24	0.0	3.679	0.007	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.433	0.002	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	0.0	0.042	0.0 T	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	0.0	0.108	0.002	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	0.0	0.557	0.003	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	0.0	0.0	0.002	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	0.0	0.0	0.004	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	0.0	0.0	0.002	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MEAN	0.0060	0.2049	0.5099	0.0835	0.0	0.0	0.0	0.0	0.0	0.0703	0.0	0.0
INCHES	0.033	1.035	2.850	0.451	0.000	0.0	0.0	0.0	0.0	0.002	0.0	0.0
STA AV	0.441	0.598	0.740	0.921	1.102	0.567	0.123	0.045	0.091	0.110	0.327	0.431

NOTES: To convert mean daily discharge in CFS to IN/DAY, multiply by 0.180316. Records began Jan. 1, 1939. STA AV based on 32 yr period.

1970			SELECTED RUNOFF EVENT			BIESEL (WACO), TEXAS			WATERSHED Y-2		
ANTECEDENT CONDITIONS			RAINFALL			RUNOFF					
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.	
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)	
EVENT OF MARCH 6 - 7, 1970											
FG 000069			RG 000069								
3- 6	0.0	0.006	3- 6	1710	0.0	0.0	3- 6	1801	0.078	0.0	
				1737	0.0667	0.03		1831	0.093	0.0003	
				1947	0.0	0.03		1901	0.109	0.0007	
				1957	0.4200	0.10		1936	0.123	0.0012	
				2007	0.3000	0.15		1946	0.135	0.0014	
WATERSHED CONDITIONS:				2037	0.3400	0.32		1956	0.168	0.0016	
33% pasture, Bermudagrass				2107	0.2800	0.46		2001	0.198	0.0017	
and native grass, good cover,				2137	0.2200	0.57		2006	0.238	0.0018	
moderately grazed; 38% til-				2207	0.2800	0.71		2011	0.281	0.0020	
led, bare; 28% fall planted				2237	0.3000	0.86		2016	0.307	0.0022	
small grain, 8 to 10 inches				2257	0.5100	1.03		2021	0.371	0.0024	
high; 1% gravel roads. Crop-				2307	0.1800	1.06		2026	0.439	0.0027	
land terraced, cultivated on				2317	0.1200	1.08		2031	0.527	0.0030	
contour.								2036	0.679	0.0034	
								2041	0.829	0.0039	
								2046	1.061	0.0045	
								2051	1.447	0.0053	
								2054	1.749	0.0059	
								2057	2.240	0.0066	
								2059	2.693	0.0072	
								2101	3.253	0.0079	
								2103	3.617	0.0088	
								2105	4.006	0.0098	
								2106	4.096	0.0103	
								2111	4.988	0.0131	
								2116	5.498	0.0164	
								2121	6.486	0.0201	
								2126	7.624	0.0245	
								2131	8.404	0.0295	
								2141	9.799	0.0409	
								2151	11.639	0.0543	
								2201	13.426	0.0700	
								2211	15.249	0.0879	
								2221	17.400	0.1084	
								2231	19.783	0.1317	

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.007513.

RIESEL (WACO), TEXAS WATERSHED Y-6

LOCATION: Falls Co., Texas; 18 mi. SE of Waco.; Brazos River Basin.

AREA: 16.30 acres

MONTHLY PRECIPITATION AND RUNOFF (inches)														RIESEL (WACO), TEXAS		WATERSHED Y-6	
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual			
1970	P	0.89	4.64	4.89	2.71	2.19	0.26	0.38	0.98	5.94	3.37	0.33	0.85	27.34			
	Q	0.071	0.537	2.160	0.251	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.019			
STA AV	P	2.03	2.77	2.31	3.96	3.89	3.60	1.47	2.09	2.71	2.85	2.87	2.27	32.83			
	Q	0.289	0.363	0.409	0.654	0.767	0.564	0.111	0.044	0.058	0.205	0.327	0.279	4.112			
ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																	
		Maximum Discharge Rate		1 Hour Date Vol.		2 Hours Date Vol.		Maximum Volume for Selected Time Interval 6 Hours Date Vol.		12 Hours Date Vol.		1 Day Date Vol.		2 Days Date Vol.		8 Days Date Vol.	
1970		3- 7	0.138	3- 7	0.132	3- 7	0.255	3- 7	0.652	3- 7	0.867	3- 6	1.272	3- 6	1.486	3- 1	1.944
MAXIMUMS FOR PERIOD OF RECORD																	
		6-10	3.790	3-29	1.900	3-29	2.340	3-29	2.950	3-29	3.130	3-29	3.670	11-22	4.870	4-19	8.490
1941				1965		1965		1965		1965		1965		1940		1957	

NOTES: Watershed conditions: 93% cotton; 5% pasture; 2% gravel roads. Cropland terraced and contour tilled; no change in conservation practices. For map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1964, USDA Misc. Pub. 1194, p. 42.11-5 (Revised). Precipitation and runoff records began Jan. 1939; station not in operation July 1943 to May 1, 1947; part-year amounts not included in averages. Precipitation data from Thiessen weighted method using rain gages 69B and 75A. For long-time precipitation records, see National Weather Service records at Waco, Texas.

1970 DAILY PRECIPITATION (inches)														RIESEL (WACO), TEXAS WATERSHED Y-6	
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec			
1	0.0	1.32	0.33	0.01E	0.0	0.26	0.0	0.0	0.85	0.0	0.05E	0.0			
2	0.0	0.0	0.09E	0.0	0.0	0.0	0.0	0.0	0.32	0.0	0.0	0.0			
3	0.07E	0.0	0.76	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.02E	0.0	0.0	0.0			
5	0.68	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
6	0.0	0.30	1.18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
7	0.0	0.0	1.21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.23	0.0	0.0			
9	0.0	0.0	0.0	2.12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
10	0.03E	0.02E	0.0	0.06	0.0	0.0	0.0	0.0	0.02E	0.0	0.0	0.0			
11	0.0	0.0	0.28	0.0	0.0	0.0	0.0	0.08E	0.0	0.89	0.0	0.0			
12	0.0	0.0	0.0	0.0	0.01E	0.0	0.0	0.0	0.03E	0.03	0.0	0.0			
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.21	0.0	0.28	0.0			
14	0.03E	0.01E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
15	0.0	0.33	0.0	0.0	0.05E	0.0	0.0	0.0	0.0	0.0	0.0	0.0			0.14E
16	0.0	0.0	0.35	0.03E	0.0	0.0	0.0	0.0	1.72	0.0	0.0	0.0			
17	0.0	0.0	0.17	0.0	0.0	0.0	0.0	0.0	0.14	0.0	0.0	0.0			
18	0.0 S	0.0	0.0	0.30	0.0	0.0	0.0	0.0	0.0	0.22	0.0	0.0			
19	0.0	0.0	0.04E	0.11	0.0	0.0	0.0	0.0	0.0	0.06	0.0	0.05E			
20	0.0	0.0	0.28	0.0	0.0	0.0	0.0	0.0	0.02E	0.0	0.0	0.09E			
21	0.0	0.0	0.17	0.0	0.0	0.0	0.12	0.0	0.11E	0.0	0.0	0.04E			
22	0.0	0.0	0.0	0.0	0.19	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
23	0.0	0.27	0.0	0.0	0.0	0.0	0.0	0.0 E	0.50	1.94	0.0	0.0			
24	0.0	1.84	0.0	0.0	0.07E	0.0	0.25	0.0	0.0	0.0	0.0	0.0			
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.43	0.0	0.0	0.0			
26	0.0	0.0	0.0	0.0	0.24	0.0	0.0	0.0	0.58	0.0	0.0	0.0			
27	0.0	0.39	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
28	0.0	0.17	0.04E	0.0	0.88	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.84	0.0	0.0	0.0	0.0			
30	0.0	0.0	0.0	0.08	0.75	0.0	0.0	0.02	0.0	0.0	0.0	0.52			
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
TOTAL		0.80	4.64	4.89	2.71	2.19	0.26	0.38	0.98	5.94	3.37	0.33	0.85		
STA AV		2.03	2.77	2.31	3.96	3.89	3.60	1.47	2.09	2.71	2.85	2.87	2.27		

NOTES: For daily air temperatures in the vicinity, see table for Watershed C, p. 42.002-1. Precipitation values are Thiessen weighted average of rain gages 69B and 75A. Records began Jan. 1939; station not in operation July 1943 to May 1, 1947; part-year amounts not included in averages. STA AV based on 27 yr period. Estimate codes may indicate that non-significant event totals are included.

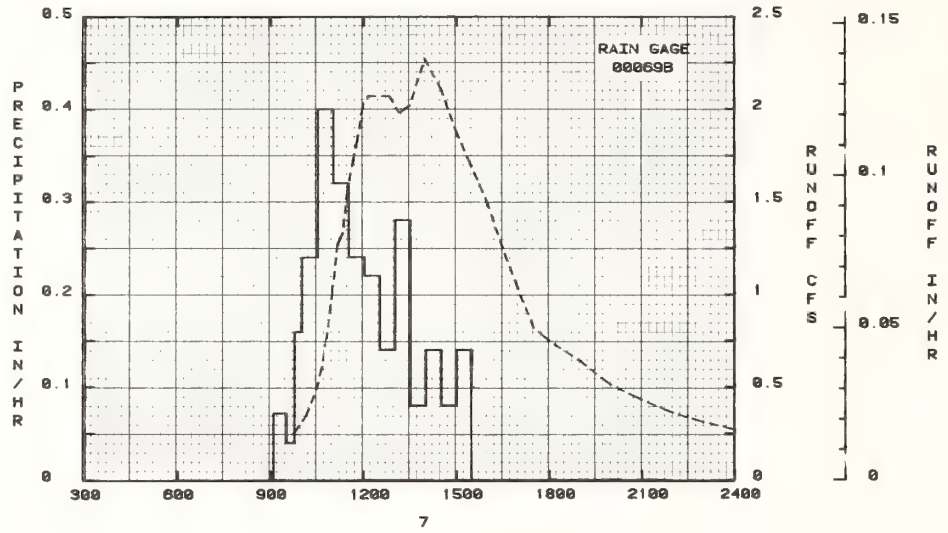
NOTES: To convert runoff in CPS to IN/HR, multiply by 0.007513.



1970 MEAN DAILY DISCHARGE (cfs)												RIESEL (WACO), TEXAS WATERSHED Y-6	
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
1	0.002	0.025	0.052	0.0 T	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
2	0.003	0.006	0.036	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
3	0.002	0.001	0.177	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
4	0.001	0.0 T	0.030	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
5	0.024	0.0 T	0.007	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
6	0.004	0.004	0.128	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
7	0.002	0.003	0.796	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
8	0.002	0.002	0.104	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
9	0.004	0.001	0.012	0.069	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
10	0.002	0.0	0.004	0.089	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
11	0.001	0.0	0.015	0.007	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
12	0.0 T	0.0	0.008	0.001	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
13	0.0	0.0	0.003	0.0 T	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
14	0.0	0.0	0.002	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
15	0.0 T	0.003	0.001	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
16	0.0	0.0	0.002	0.0 T	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
17	0.0	0.0	0.026	0.001	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
18	0.0	0.0	0.007	0.001	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
19	0.0	0.0	0.008	0.003	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
20	0.0 T	0.0	0.009	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
21	0.0	0.0	0.037	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
22	0.0	0.0	0.009	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
23	0.0	0.0	0.004	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
24	0.0	0.199	0.001	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
25	0.0	0.063	0.001	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
26	0.0	0.007	0.0 T	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
27	0.0	0.011	0.0 T	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
28	0.0	0.043	0.0 T	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
MEAN	0.0016	0.0131	0.0477	0.0057	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
INCHES	0.071	0.537	2.160	0.251	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
STA AV	0.289	0.363	0.409	0.654	0.767	0.564	0.111	0.044	0.098	0.205	0.327	0.279	

NOTES: To convert mean daily discharge in CFS to IN/DAY, multiply by 1.460224. Records began Jan. 1939; station not in operation July 1943 to May 1, 1947; part-year amounts not included in averages. STA AV based on 27 yr period.

1970 SELECTED RUNOFF EVENT			RIESEL (WACO), TEXAS WATERSHED Y-6								
ANTECEDENT CONDITIONS			RAINFALL			RUNOFF					
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.	
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)	
EVENT OF MARCH 7, 1970											
RG 00069B			RG 00069B								
3- 7	0.0	0.252	3- 7	906	0.0	0.0	3- 7	944	0.249	0.0	
				931	0.0720	0.03		954	0.287	0.0027	
				946	0.0430	0.04		1009	0.350	0.0075	
				1001	0.1600	0.08		1019	0.418	0.0114	
				1031	0.2400	0.20		1029	0.494	0.0160	
WATERSHED CONDITIONS:				1101	0.4000	0.40		1039	0.611	0.0216	
93% tilled, bare; 5% pasture,				1131	0.3200	0.56		1049	0.787	0.0287	
Bermudagrass, good cover,				1201	0.2400	0.68		1059	1.014	0.0378	
moderately grazed; 2% gravel				1231	0.2200	0.79		1109	1.272	0.0494	
roads. Cropland terraced,				1301	0.1400	0.86		1119	1.333	0.0626	
cultivated on contour.				1331	0.2800	1.00		1129	1.576	0.0773	
				1401	0.0800	1.04		1139	1.719	0.0940	
				1431	0.1400	1.11		1149	1.858	0.1121	
				1501	0.0800	1.15		1159	2.027	0.1318	
				1531	0.1400	1.22		1209	2.074	0.1526	
								1249	2.074	0.2367	
								1309	1.981	0.2778	
								1329	2.015	0.3183	
								1359	2.269	0.3835	
								1429	2.109	0.4501	
								1459	1.880	0.5108	
								1529	1.688	0.5651	
								1559	1.499	0.6136	
								1629	1.246	0.6554	
								1659	1.029	0.6900	
								1729	0.819	0.7181	
								1759	0.755	0.7420	
								1859	0.638	0.7844	
								1959	0.509	0.8193	
								2059	0.427	0.8478	
								2159	0.361	0.8718	
								2259	0.312	0.8923	
								2400	0.275	0.9105	



EVENT OF MARCH 7, 1970
 RIESEL (WACO), TEXAS WATERSHED Y-6

RIESEL (WACO), TEXAS WATERSHED Y-7

LOCATION: Falls Co., Texas; 18 mi. SE of Waco; Brazos River Basin.

AREA: 40.30 acres

MONTHLY PRECIPITATION AND RUNOFF (inches)													RIESEL (WACO), TEXAS WATERSHED Y-7	
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual	
1970 P	1.82	4.67	5.39	2.67	2.15	0.41	0.45	1.05	5.65	3.33	0.36	0.86	27.51	
Q	0.000	1.128	2.855	0.752	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.735	
STA AV P	2.06	2.81	2.34	4.05	3.90	3.57	1.44	2.15	2.65	2.87	2.92	2.29	33.04	
Q	0.340	0.499	0.589	0.879	0.916	0.668	0.105	0.107	0.151	0.187	0.421	0.358	5.220	
ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS														
Maximum Discharge		1 Hour		2 Hours		6 Hours		12 Hours		1 Day		2 Days		8 Days
Date	Rate	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date Vol.
1970	2-24	0.289	2-24	0.259	2-24	0.435	3- 7	0.822	3- 7	0.964	3- 6	1.663	3- 6	1.745 2-28 2.640
MAXIMUMS FOR PERIOD OF RECORD														
	6-10	3.590	4-19	2.340	3-29	2.960	3-29	3.580	3-29	3.840	3-29	4.660	11-22	5.370 4-19 8.890
	1941		1957				1965		1965		1965		1940	1957

NOTES: Watershed conditions: 100% pasture, Bermudagrass, moderately grazed. For map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1964, USDA Misc. Pub. 1194, p. 42.11-5 (Revised). Precipitation and runoff records began Jan. 1939; station not in operation from July 1943 to May 1, 1947; part-year amounts not included in averages. Precipitation data from Thiessen weighted method using rain gages 89 and W-2A. For long-time precipitation records, see National Weather Service Records at Waco, Texas.

1970	DAILY PRECIPITATION (inches)												RIESEL (WACO), TEXAS WATERSHED Y-7	
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
1	0.0	1.38	0.29	0.02E	0.09E	0.41	0.0	0.0	0.84	0.0	0.05E	0.0		
2	0.0	0.0	0.02E	0.0	0.0	0.0	0.0	0.0	0.36	0.0	0.0	0.0		
3	0.05E	0.0	0.85	0.0	0.0	0.0	0.0	0.07E	0.0	0.0	0.0	0.0		
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E	0.0	0.0	0.0	0.0		
5	0.70	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
6	0.0	0.31	1.26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
7	0.0	0.0	1.26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.16	0.0	0.0		
9	0.0	0.0	0.0	2.09	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
10	0.04E	0.0	0.0	0.07	0.0	0.0	0.0	0.0	0.01E	0.0	0.0	0.0		
11	0.0	0.0	0.32	0.0	0.0	0.0	0.0	0.07E	0.0	1.01	0.0	0.0		
12	0.0	0.0	0.0	0.0	0.01E	0.0	0.0	0.0	0.0	0.04	0.0	0.0		
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.21	0.0	0.31	0.0		
14	0.03E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
15	0.0	0.41	0.0	0.0	0.05E	0.0	0.0	0.0	0.0	0.0	0.0	0.13E		
16	0.0	0.0	0.37	0.02E	0.0	0.0	0.0	0.0	1.52	0.0	0.0	0.0		
17	0.0	0.0	0.19	0.0	0.0	0.0	0.0	0.0	0.12	0.0	0.0	0.0		
18	0.0 S	0.0	0.0	0.26	0.0	0.0	0.0	0.0	0.0	0.18	0.0	0.0		
19	0.0	0.0	0.03E	0.14	0.0	0.0	0.0	0.0	0.0	0.11	0.0	0.03E		
20	0.0	0.0	0.27	0.0	0.0	0.0	0.0	0.0	0.03E	0.0	0.0	0.13E		
21	0.0	0.0	0.19	0.0	0.0	0.0	0.00E	0.0	0.11	0.0	0.0	0.04E		
22	0.0	0.0	0.0	0.0	0.17	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
23	0.0	0.23	0.0	0.0	0.03E	0.0	0.0	0.0	0.49	1.83	0.0	0.0		
24	0.0	1.85	0.0	0.0	0.07E	0.0	0.45E	0.0	0.0	0.0	0.0	0.0		
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.35	0.0	0.0	0.0		
26	0.0	0.0	0.0	0.0	0.25	0.0	0.0	0.0	0.62	0.0	0.0	0.0		
27	0.0	0.32	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
28	0.0	0.17	0.04E	0.0	0.86	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.89	0.0	0.0	0.0	0.0		
30	0.0	0.0	0.06E	0.62	0.0	0.0	0.0	0.02	0.0	0.0	0.0	0.53		
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
TOTAL	0.82	4.67	5.09	2.67	2.15	0.41	0.45	1.05	5.65	3.33	0.36	0.86		
STA AV	2.96	2.81	2.34	4.05	3.90	3.57	1.44	2.15	2.65	2.87	2.92	2.29		

NOTES: For daily air temperatures in the vicinity, see table for Watershed C, p. 42.002-1. Precipitation values are Thiessen weighted average of rain gages 89 and W-2A. Records began Jan. 1939; station not in operation from July 1943 to May 1, 1947; part-year amounts not included in averages. STA AV based on 27 yr period. Estimate codes may indicate that non-significant event totals are included.

1970 MEAN DAILY DISCHARGE (cfs) RIESEL (WACO), TEXAS WATERSHED Y-7												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.0	0.190	0.180	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	0.0	0.015	0.096	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3	0.0	0.0 T	1.043	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4	0.0	0.0	0.067	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	0.001	0.0	0.013	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6	0.0	0.0	0.671	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7	0.0	0.0	2.178	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8	0.0	0.0	0.096	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9	0.0	0.0	0.016	0.751	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10	0.0	0.0	0.003	0.503	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11	0.0	0.0	0.014	0.010	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	0.0	0.0	0.011	0.0 T	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13	0.0	0.0	0.001	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0 T	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0 T	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.0	0.165	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	0.0	0.0	0.015	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	0.0	0.0	0.016	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.009	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.175	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.023	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	0.0	0.0	0.005	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	0.0	1.339	0.0 T	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.139	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	0.0	0.009	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	0.0	0.008	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	0.0	0.194	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MEAN	0.0	0.0677	0.1548	0.0421	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
INCHES	0.000	1.128	2.855	0.752	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
STA AV	0.340	0.499	0.589	0.879	0.916	0.668	0.105	0.107	0.151	0.187	0.421	0.358

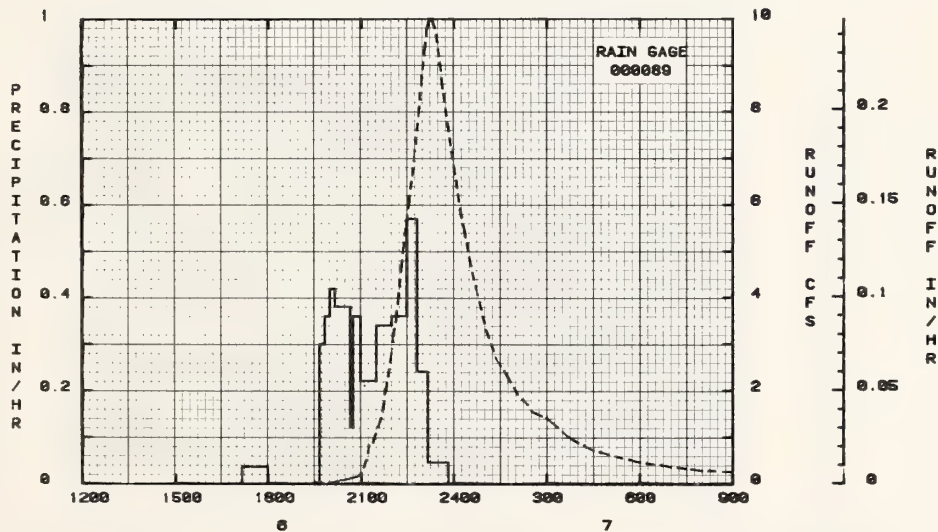
NOTES: To convert mean daily discharge in CFS to IN/DAY, multiply by 0.595041. Records began Jan. 1939; station not in operation from July 1943 to May 1, 1947; part-year amounts not included in averages. STA AV based on 27 yr period.

1970 SELECTED RUNOFF EVENT			RIESEL (WACO), TEXAS WATERSHED Y-7								
ANTECEDENT CONDITIONS			RAINFALL				RUNOFF				
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.	
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)	
EVENT OF MARCH 6 - 7, 1970											
RG 000089			RG 000089								
3- 6	0.0	0.002	3- 6	1709	0.0	0.0	3- 6	1930	0.009	0.0	
				1759	0.0360	0.03		2000	0.020	0.0002	
				1939	0.0	0.03		2005	0.027	0.0002	
				1949	0.3000	0.08		2010	0.037	0.0003	
				1959	0.3600	0.14		2015	0.053	0.0004	
WATERSHED CONDITIONS:				2009	0.4200	0.21		2020	0.066	0.0005	
100% pasture, Bermudagrass,				2039	0.3800	0.40		2025	0.073	0.0006	
fair cover, moderately				2044	0.1200	0.41		2030	0.089	0.0008	
grazed, dormant.				2049	0.3600	0.84		2035	0.102	0.0010	
				2059	0.3600	0.50		2040	0.120	0.0012	
				2129	0.2200	0.61		2050	0.147	0.0018	
				2159	0.3400	0.78		2055	0.172	0.0021	
				2229	0.3600	0.96		2100	0.230	0.0025	
				2249	0.5700	1.15		2105	0.351	0.0031	
				2309	0.2400	1.23		2110	0.515	0.0040	
				2349	0.0450	1.26		2113	0.656	0.0047	
								2115	0.821	0.0053	
								2123	0.880	0.0081	
								2128	1.070	0.0101	
								2133	1.235	0.0125	
								2138	1.408	0.0152	
								2143	1.618	0.0183	
								2148	2.005	0.0220	
								2153	2.308	0.0265	
								2158	2.746	0.0317	
								2203	3.175	0.0378	
								2208	3.569	0.0448	
								2213	4.099	0.0527	
								2218	4.656	0.0617	
								2223	5.194	0.0719	
								2233	6.053	0.0951	
								2243	7.008	0.1221	
								2253	8.116	0.1534	
								2258	8.771	0.1768	
								2303	9.337	0.1895	

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.024793.

1970			SELECTED RUNOFF EVENT			RIESEL (WACO), TEXAS					WATERSHED Y-7	
ANTECEDENT CONDITIONS			RAINFALL			RUNOFF						
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.		
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)		
EVENT OF MARCH 6 - 7, 1970 (CONTINUED)												
							3- 6	2308	9.776	0.2093		
								2313	9.998	0.2297		
								2318	9.998	0.2503		
								2323	9.803	0.2708		
								2328	9.500	0.2907		
								2333	9.039	0.3098		
								2338	8.507	0.3280		
								2348	7.731	0.3615		
								2400	6.813	0.3976		
							3- 7	13	5.868	0.4316		
								23	5.304	0.4547		
								33	4.677	0.4753		
								43	4.200	0.4936		
								53	3.743	0.5100		
								103	3.267	0.5245		
								123	2.660	0.5490		
								143	2.308	0.5695		
								203	1.913	0.5869		
								223	1.690	0.6018		
								233	1.532	0.6085		
								250	1.435	0.6189		
								300	1.399	0.6248		
								320	1.209	0.6356		
								340	1.012	0.6448		
								400	0.874	0.6526		
								430	0.709	0.6624		
								500	0.607	0.6706		
								600	0.452	0.6837		
								700	0.347	0.6936		
								800	0.269	0.7012		

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.024793.



EVENT OF MARCH 6 - 7, 1970
RIESEL (WACO), TEXAS WATERSHED Y-7

RIESEL (WACO), TEXAS WATERSHED Y-8

LOCATION: Falls Co., Texas; 18 mi. SE of Waco; Brazos River Basin.

AREA: 20.80 acres

MONTHLY PRECIPITATION AND RUNOFF (inches)							RIESEL (WACO), TEXAS WATERSHED Y-8						
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
1970 P	0.73	4.75	4.78	2.57	2.22	0.30	0.41	0.90	5.71	3.37	0.32	0.81	26.87
Q	0.001	0.807	2.811	0.263	0.0	0.0	0.0	0.0	0.0	0.001	0.0	0.0	3.882
STA AV P	1.95	2.79	2.41	4.05	3.80	3.73	1.50	2.12	2.81	2.97	2.54	2.29	33.36
Q	0.321	0.416	0.503	0.782	0.825	0.617	0.122	0.061	0.132	0.124	0.375	0.303	4.582
ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS													
Maximum Discharge		1 Hour		2 Hours		6 Hours		12 Hours		1 Day		2 Days	
Date	Rate	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.
1970 2-24	0.204	3- 6	0.193	3- 6	0.367	3- 7	0.872	3- 7	1.021	3- 6	1.783	3- 6	1.855
												2-28	2.655
MAXIMUMS FOR PERIOD OF RECORD													
6-10	3.290	4-19	2.410	4-19	2.800	4-23	3.320	4-23	3.370	3-29	3.590	11-22	5.640
1941		1957		1957		1957		1957		1965		1940	1957

NOTES: Watershed conditions: 95% fall planted oats, 3% pasture; 2% gravel roads. Cropland terraced and contour tilled no change in conservation practices. For map of Watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1964, USDA Misc. Pub. 1194, p. 42.11-5 (revised). Precipitation and runoff records began Mar. 1, 1939; station not in operation July 1943 to Jan. 1, 1949; part-year amounts not included in averages. Precipitation data obtained from rain gage 75A. For long-time precipitation records, see National Weather Service records at Waco, Texas.

1970 DAILY PRECIPITATION (inches)							RIESEL (WACO), TEXAS WATERSHED Y-8						
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
1	0.0	1.36	0.28	0.0	0.0	0.30	0.0	0.0	0.80	0.0	0.05E	0.0	
2	0.0	0.0	0.07E	0.0	0.0	0.0	0.0	0.0	0.33	0.0	0.0	0.0	
3	0.08E	0.0	0.81	0.0	0.0	0.0	0.0	0.02E	0.0	0.0	0.0	0.0	
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0E	0.0	0.0	0.0	0.0	
5	0.65	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
6	0.0	0.29	1.10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
7	0.0	0.0	1.19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.22	0.0	0.0	
9	0.0	0.0	0.0	2.07	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
10	0.0	0.05E	0.0	0.05	0.0	0.0	0.0	0.0	0.01E	0.0	0.0	0.0	
11	0.0	0.0	0.25	0.0	0.0	0.0	0.0	0.06E	0.0	0.90	0.0	0.0	
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.03	0.0	0.0	
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.23	0.0	0.27	0.0	
14	0.0	0.03E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
15	0.0	0.36	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.13	
16	0.0	0.0	0.40	0.03E	0.0	0.0	0.0	0.0	1.59	0.0	0.0	0.0	
17	0.0	0.0	0.16	0.0	0.0	0.0	0.0	0.0	0.11	0.0	0.0	0.0	
18	0.0	0.0	0.0	0.29	0.0	0.0	0.0	0.0	0.0	0.22	0.0	0.0	
19	0.0	0.0	0.03E	0.13	0.0	0.0	0.0	0.0	0.0	0.07	0.0	0.03E	
20	0.0	0.0	0.27	0.0	0.0	0.0	0.0	0.0	0.03E	0.0	0.0	0.11E	
21	0.0	0.0	0.18	0.0	0.0	0.0	0.11	0.0	0.13	0.0	0.0	0.03E	
22	0.0	0.0	0.0	0.0	0.18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
23	0.0	0.26	0.0	0.0	0.0	0.0	0.0	0.0E	0.48	1.93	0.0	0.0	
24	0.0	1.82	0.0	0.0	0.09E	0.0	0.30	0.0	0.0	0.0	0.0	0.0	
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.43	0.0	0.0	0.0	
26	0.0	0.0	0.0	0.0	0.25	0.0	0.0	0.0	0.57	0.0	0.0	0.0	
27	0.0	0.38	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
28	0.0	0.20	0.04E	0.0	0.92	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.81	0.0	0.0	0.0	0.0	
30	0.0	0.0	0.0	0.0	0.78	0.0	0.0	0.01	0.0	0.0	0.0	0.51	
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
TOTAL	0.73	4.75	4.78	2.57	2.22	0.30	0.41	0.90	5.71	3.37	0.32	0.81	
STA AV	1.95	2.79	2.41	4.05	3.80	3.73	1.50	2.12	2.81	2.97	2.54	2.29	

NOTES: For daily air temperatures in the vicinity, see table for Watershed C, p. 42.032-1. Precipitation values are from rain gage 75A. Records began Mar. 1, 1939; station not in operation July 1943 to Jan. 1, 1949; part-year amounts not included in averages. STA AV based on 25 yr period. Estimate codes may indicate the non-significant event totals are included.

1970 MEAN DAILY DISCHARGE (cfs) RIESEL (WACO), TEXAS WATERSHED Y-8												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.0	0.036	0.109	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	0.0	0.0	0.042	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3	0.0	0.0	0.504	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4	0.0	0.0	0.015	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	0.0 T	0.0	0.031	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6	0.0	0.0	0.384	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7	0.0	0.0	1.203	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8	0.0	0.0	0.038	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9	0.0	0.0	0.001	0.180	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10	0.0	0.0	0.0	0.049	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11	0.0	0.0	0.007	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	0.0	0.0	0.004	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13	0.0	0.0	0.0 T	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.032	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.0	0.062	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	0.0	0.0	0.001	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	0.0	0.0	0.004	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.008	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.067	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.005	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	0.0	0.0	0.0 T	0.0	0.0	0.0	0.0	0.0	0.0	0.001	0.0	0.0
24	0.0	0.561	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.034	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	0.0	0.011	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	0.0	0.064	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MEAN	0.0	0.0252	0.0792	0.0076	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
INCHES	0.001	0.807	2.811	0.263	0.0	0.0	0.0	0.0	0.0	0.001	0.0	0.0
STA AV	0.321	0.416	0.503	0.782	0.825	0.617	0.122	0.061	0.132	0.124	0.375	0.303

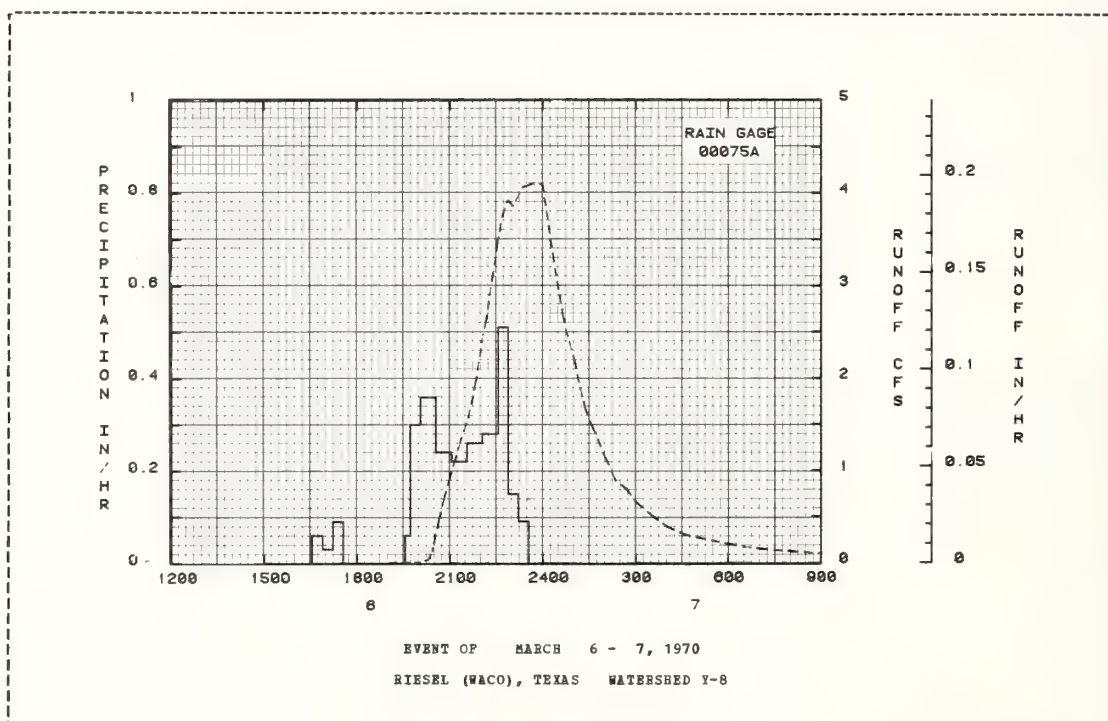
NOTES: To convert mean daily discharge in CFS to IN/DAY, multiply by 1.144310. Records began Mar. 1, 1939; station not in operation July 1943 to Jan. 1, 1949; part-year amounts not included in averages. STA AV based on 25 yr period.

1970			SELECTED RUNOFF EVENT			RIESEL (WACO), TEXAS			WATERSHED Y-8		
ANTECEDENT CONDITIONS			RAINFALL			RUNOFF					
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.	
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)	
EVENT OF MARCH 6 - 7, 1970											
RG 00075A			RG 00075A								
3- 6	0.0	0.000	3- 6	1633	0.0	0.0	3- 6	1902	0.010	0.0	
				1653	0.0600	0.02		1932	0.010	0.0002	
				1713	0.0300	0.03		1942	0.010	0.0003	
				1733	0.0900	0.06		1952	0.010	0.0004	
				1933	0.0	0.06		2002	0.010	0.0005	
WATERSHED CONDITIONS:											
95% fall planted oats 8 to			1943			0.0600	0.07	2012	0.030	0.0007	
10 inches high; 3% pasture,			1953			0.3000	0.12	2017	0.040	0.0008	
Bermudagrass, good cover			2003			0.3000	0.17	2020	0.060	0.0009	
moderately grazed, dormant;			2033			0.3600	0.35	2023	0.100	0.0011	
2% gravel roads. Cropland			2043			0.2400	0.39	2025	0.130	0.0013	
terraced, cultivated on											
contour.			2053			0.2400	0.43	2027	0.170	0.0015	
			2103			0.2400	0.47	2029	0.220	0.0018	
			2133			0.2200	0.58	2032	0.310	0.0024	
			2203			0.2600	0.71	2037	0.430	0.0039	
			2233			0.2800	0.85	2042	0.550	0.0059	
			2253			0.5100	1.02	2047	0.660	0.0083	
			2313			0.1500	1.07	2052	0.780	0.0112	
			2333			0.0900	1.10	2102	0.980	0.0182	
									2112	1.160	0.0267
									2122	1.360	0.0367
									2132	1.510	0.0481
									2142	1.730	0.0610
									2152	2.020	0.0759
									2202	2.400	0.0935
									2212	2.680	0.1137
									2222	3.080	0.1366
									2232	3.450	0.1626
									2242	3.760	0.1912
									2252	3.920	0.2217
									2302	3.860	0.2526
									2322	4.070	0.3156
									2342	4.110	0.3806
									2400	4.090	0.4392
									22	3.260	0.5034
									42	2.600	0.5500

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.047680.

1970 SELECTED RUNOFF EVENT			RIESEL (WACO), TEXAS WATERSHED Y-8							
ANTECEDENT CONDITIONS			RAINFALL				RUNOFF			
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)
EVENT OF MARCH 6 - 7, 1970 (CONTINUED)										
							3- 7	102	2.180	0.5880
								122	1.670	0.6186
								142	1.400	0.6430
								202	1.130	0.6631
								222	0.890	0.6791
								242	0.800	0.6925
								302	0.650	0.7040
								332	0.510	0.7179
								402	0.390	0.7286
								432	0.310	0.7369
								502	0.270	0.7438
								602	0.200	0.7549
								702	0.150	0.7632
								802	0.120	0.7697

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.047680.



RIESEL (WACO), TEXAS WATERSHED Y-10

LOCATION: Falls Co., Texas; 18 mi. SE of Waco; Brazos River Basin.

AREA: 18.60 acres

MONTHLY PRECIPITATION AND RUNOFF (inches)														RIESEL (WACO), TEXAS		WATERSHED Y-10	
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual			
1970	P	0.85	4.62	4.93	2.73	2.20	0.18	0.41	0.95	6.03	3.38	0.33	0.86	27.47			
	Q	0.012	0.959	2.656	0.592	0.0	0.0	0.0	0.0	0.0	0.296	0.0	0.0	4.516			
STA AV	P	2.10	2.68	2.35	3.94	3.91	3.50	1.44	2.08	2.71	2.75	2.82	2.31	32.59			
	Q	0.414	0.428	0.566	0.897	0.736	0.634	0.138	0.081	0.188	0.200	0.391	0.344	5.616			
ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																	
		Maximum Discharge		1 Hour		2 Hours		Maximum Volume for Selected Time Interval				2 Days		8 Days			
		Date	Rate	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.		
1970		10-23	0.449	2-24	0.314	3- 7	0.516	3- 7	1.006	3- 7	1.099	3- 6	1.734	3- 6	1.788	2-27	2.671
MAXIMUMS FOR PERIOD OF RECORD																	
		4-19	3.730	4-19	2.900	4-19	3.480	3-29	4.130	3-29	4.270	3-29	4.620	4-23	5.340	4-19	10.570
		1957		1957		1957		1965		1965		1965		1957		1957	

NOTES: Watershed conditions: 93% row grain sorghum; 4% pasture; 3% gravel roads. Cropland terraced and contour tilled; no change in conservation practices. For map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1964, USDA Misc. Pub. 1194, p. 42.11-5 (Revised). Precipitation and runoff records began July 1, 1938; station not in operation July 1943 to May 1, 1946; part-year amounts not included in averages. Precipitation data from Thiessen weighted method using rain gages 69 and 69B. For long-time precipitation records, see National Weather Service records at Waco, Texas.

1970 DAILY PRECIPITATION (inches)													RIESEL (WACO), TEXAS WATERSHED Y-10	
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
1	0.0	1.31	0.34	0.02E	0.00E	0.18E	0.0	0.0	0.85	0.0	0.35E	0.0		
2	0.0	0.0	0.10E	0.0	0.0	0.0	0.0	0.01E	0.33	0.0	0.0	0.0		
3	0.06E	0.0	0.70	0.0	0.0	0.0	0.0	0.01E	0.0	0.0	0.0	0.0		
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.02E	0.0	0.0	0.0	0.0		
5	0.69	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
6	0.0	0.29	1.18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
7	0.0	0.0	1.22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.23	0.0	0.0		
9	0.0	0.0	0.0	2.10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
10	0.05E	0.0	0.0	0.07	0.0	0.0	0.0	0.0	0.03E	0.0	0.0	0.0		
11	0.0	0.0	0.36	0.0	0.0	0.0	0.0	0.09E	0.0	0.88	0.0	0.0		
12	0.0	0.0	0.0	0.0	0.02E	0.0	0.0 E	0.0	0.05E	0.03	0.0	0.0		
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.20	0.0	0.28	0.0		
14	0.04E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
15	0.0	0.33	0.0	0.0	0.07E	0.0	0.0	0.0	0.0	0.0	0.0	0.15E		
16	0.0	0.0	0.32	0.03E	0.0	0.0	0.0	0.0	1.78	0.0	0.0	0.0		
17	0.0	0.0	0.18	0.0	0.0	0.0	0.0	0.0	0.15	0.0	0.0	0.0		
18	0.0 S	0.0	0.0	0.29	0.0	0.0	0.0	0.0	0.0	0.21	0.0	0.0		
19	0.0	0.0	0.04E	0.11	0.0	0.0	0.0	0.0	0.0	0.06	0.0	0.05E		
20	0.0	0.0	0.28	0.0	0.0	0.0	0.0	0.0	0.02E	0.0	0.0	0.09E		
21	0.0	0.0	0.17	0.0	0.0	0.0	0.13	0.0	0.10E	0.0	0.0	0.04E		
22	0.0	0.0	0.0	0.0	0.18	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
23	0.0	0.28	0.0	0.0	0.02E	0.0	0.0	0.01E	0.51	1.95	0.0	0.0		
24	0.0	1.87	0.0	0.0	0.06E	0.0	0.28	0.0	0.0	0.0	0.0	0.0		
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.41	0.0	0.0	0.0		
26	0.0	0.0	0.0	0.0	0.23	0.0	0.0	0.0	0.59	0.0	0.0	0.0		
27	0.0	0.40	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
28	0.0	0.15	0.04E	0.0	0.86	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.78	0.0	0.0	0.0	0.0		
30	0.0	0.0	0.0	0.11E	0.75	0.0	0.0	0.03	0.0	0.0	0.0	0.52		
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
TOTAL	0.85	4.62	4.93	2.73	2.20	0.18	0.41	0.95	6.03	3.38	0.33	0.86		
STA AV	2.10	2.68	2.35	3.94	3.51	3.50	1.44	2.08	2.71	2.75	2.82	2.31		

NOTES: For daily air temperatures in the vicinity, see table for Watershed C, p. 42.002-1. Precipitation values are Thiessen weighted average of rain gages 69 and 69B. Records began July 1, 1938; station not in operation July 1943 to May 1, 1946; part-year amounts not included in averages. STA AV based on 28 yr period. Estimate codes may indicate that non-significant event totals are included.

1970	MEAN DAILY DISCHARGE (cfs)					RIESEL (WACO), TEXAS					WATERSHED Y-10	
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.0	0.040	0.146	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	0.0	0.001	0.074	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3	0.0	0.0	0.410	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4	0.0	0.0	0.011	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	0.009	0.0	0.0 T	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6	0.0	0.0	0.410	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7	0.0	0.0	0.962	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8	0.0	0.0	0.028	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9	0.0	0.0	0.001	0.342	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10	0.0	0.0	0.0	0.115	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11	0.0	0.0	0.0	0.006	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0 T	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.0	0.020	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.0 T	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.014	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0 T	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.231	0.0	0.0
24	0.0	0.571	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.051	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	0.0	0.001	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	0.0	0.009	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	0.0	0.076	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MEAN	0.0003	0.0268	0.0670	0.0154	0.0	0.0	0.0	0.0	0.0	0.0075	0.0	0.0
INCHES	0.012	0.959	2.656	0.592	0.0	0.0	0.0	0.0	0.0	0.296	0.0	0.0
STA AV	0.414	0.428	0.566	0.897	0.736	0.634	0.138	0.081	0.188	0.200	0.391	0.344

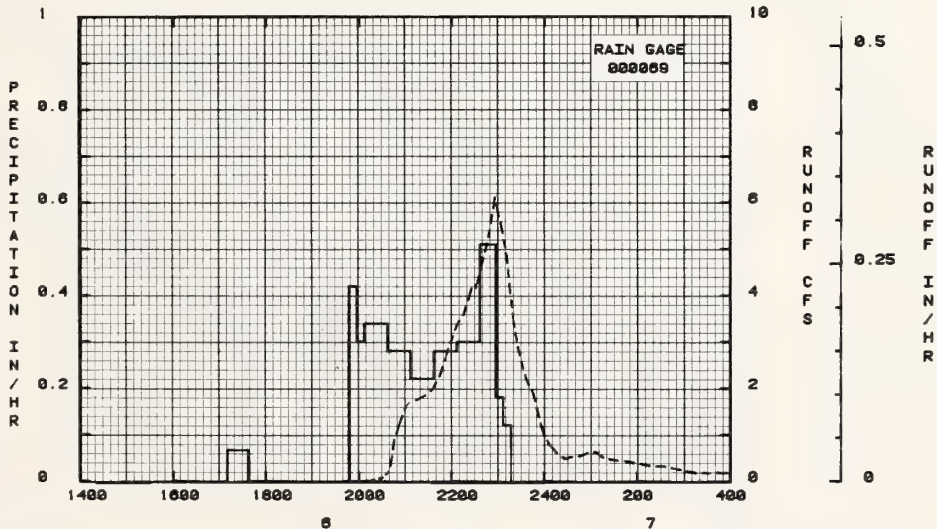
NOTES: To convert mean daily discharge in CFS to IN/DAY, multiply by 1.279659. Records began July 1, 1938; station not in operation July 1943 to May 1, 1946; part-year amounts not included in averages. STA AV based on 28 yr period.

1970	SELECTED RUNOFF EVENT			RIESEL (WACO), TEXAS WATERSHED Y-10							
ANTECEDENT CONDITIONS			RAINFALL				RUNOFF				
Date Mo-Day	Rainfall (inches)	Runoff (inches)	Date Mo-Day	Time of Day	Intensity (in/hr)	Acc. (inches)	Date Mo-Day	Time of Day	Rate (cfs)	Acc. (inches)	
EVENT OF MARCH 6 - 7, 1970											
RG 000069											
3- 6	0.0	0.0	3- 6	1710	0.0	0.0	3- 6	1946	0.0	0.0	
				1737	0.0667	0.03		1951	0.0	0.0	
				1947	0.0	0.03		1956	0.001	0.0	
				1957	0.4200	0.10		2001	0.003	0.0	
				2007	0.3000	0.15		2006	0.007	0.0	
WATERSHED CONDITIONS:											
93% tilled, bare; 4% pasture,											
Bermudagrass, good cover											
moderately grazed, dormant;											
3% gravel roads. Cropland											
terraced, contour cultivation.											
				2037	0.3400	0.32		2011	0.015	0.0	
				2107	0.2800	0.46		2016	0.023	0.0001	
				2137	0.2200	0.57		2021	0.034	0.0002	
				2207	0.2800	0.71		2026	0.060	0.0004	
				2237	0.3000	0.86		2031	0.083	0.0007	
				2257	0.5100	1.03		2036	0.150	0.0012	
				2307	0.1800	1.06		2039	0.211	0.0017	
				2317	0.1200	1.08		2041	0.326	0.0022	
								2043	0.542	0.0030	
								2046	0.899	0.0049	
								2051	1.153	0.0094	
								2056	1.410	0.0151	
								2101	1.620	0.0218	
								2106	1.702	0.0292	
								2116	1.762	0.0446	
								2126	1.849	0.0606	
								2136	1.991	0.0777	
								2146	2.325	0.0969	
								2156	2.841	0.1198	
								2206	3.334	0.1473	
								2216	3.620	0.1782	
								2226	4.153	0.2127	
								2231	4.174	0.2312	
								2236	4.437	0.2503	
								2241	4.805	0.2708	
								2246	5.117	0.2929	
								2251	5.598	0.3167	
								2256	6.108	0.3427	
								2301	5.703	0.3690	
								2306	5.342	0.3935	

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.053319.

1970 SELECTED RUNOFF EVENT			RIESEL (WACO), TEXAS WATERSHED Y-10							
ANTECEDENT CONDITIONS			RAINFALL			RUNOFF				
Date Mo-Day	Rainfall (inches)	Runoff (inches)	Date Mo-Day	Time of Day	Intensity (in/hr)	Acc. (inches)	Date Mo-Day	Time of Day	Rate (cfs)	Acc. (inches)
EVENT OF MARCH 6 - 7, 1970 (CONTINUED)										
							3- 6	2311	4.852	0.4161
								2316	4.046	0.4359
								2321	3.334	0.4523
								2326	2.858	0.4660
								2336	2.209	0.4885
								2346	1.874	0.5067
								2351	1.529	0.5143
								2356	1.172	0.5203
								2400	1.003	0.5242
							3- 7	6	0.799	0.5290
								16	0.595	0.5352
								26	0.478	0.5400
								36	0.526	0.5445
								46	0.537	0.5492
								56	0.613	0.5543
								106	0.625	0.5598
								116	0.515	0.5649
								126	0.457	0.5692
								146	0.423	0.5770
								156	0.386	0.5806
								216	0.334	0.5870
								236	0.310	0.5927
								256	0.241	0.5976
								306	0.198	0.5996
								316	0.169	0.6012
								356	0.179	0.6074
								456	0.156	0.6163
								556	0.129	0.6239
								656	0.100	0.6300
								756	0.080	0.6348
								826	0.074	0.6369

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.053319.



EVENT OF MARCH 6 - 7, 1970
RIESEL (WACO), TEXAS WATERSHED Y-10

RIESEL (WACO), TEXAS SW-11

LOCATION: Falls County, Texas; 19 miles southeast of Waco; Brazos River Basin.

AREA: 2.66 acres

MONTHLY PRECIPITATION AND RUNOFF (inches)										RIESEL (WACO), TEXAS SW-11					
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual	
1970	P	0.82	4.67	5.09	2.66	2.15	0.41	0.46	1.05	5.65	3.33	0.36	0.86	27.51	
	Q	0.011	0.763	2.695	0.011	0.0	0.0	0.0	0.0	0.0	0.002	0.0	0.0	3.482	
STA AV	P	1.95	3.50	3.04	3.86	3.43	4.04	1.15	1.85	3.04	3.71	3.52	2.65	35.72	
	Q	0.235	0.542	0.782	0.083	0.275	1.012	0.113	0.0	0.375	0.445	1.213	0.590	5.667	
ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS															
		Maximum Discharge		1 Hour		2 Hours		Maximum Volume for Selected Time Interval							
		Date	Rate	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.
1970		2-24	0.573	2-24	0.436	3- 7	0.600	3- 7	1.176	3- 7	1.230	3- 6	1.931	3- 6	1.954
						3- 7								3- 1	2.628
MAXIMUMS FOR PERIOD OF RECORD															
		10-31	6.670	11-22	2.060	11-22	2.260	11-22	2.580	11-22	2.820	11-22	3.590	11-22	5.900
		1940		1940		1940		1940		1940		1940		1940	1940

NOTES: Watershed conditions: 100% winter growing Harding grass, moderately grazed. For map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1969, USDA Misc. Pub. 1370, p. 42.023-5. Precipitation and runoff records began March 1938; discontinued July 1943; reestablished July 1, 1969, part-year amounts not included in station averages. Precipitation data from rain gage 89. For long-time precipitation records, see National Weather Service records at Waco, Texas.

1970 DAILY PRECIPITATION (inches)													RIESEL (WACO), TEXAS SW-11	
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
1	0.0	1.38	0.29	0.02E	0.09E	0.41	0.0	0.0	0.84	0.0	0.05E	0.0		
2	0.0	0.0	0.02E	0.0	0.0	0.0	0.0	0.0	0.36	0.0	0.0	0.0		
3	0.05E	0.0	0.85	0.0	0.0	0.0	0.0	0.07E	0.0	0.0	0.0	0.0		
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0 E	0.0	0.0	0.0	0.0		
5	3.70	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
6	3.0	0.31	1.26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
7	0.0	0.0	1.26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.16	0.0	0.0		
9	0.0	0.0	0.0	2.09	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
10	0.04E	0.0	0.0	0.07	0.0	0.0	0.0	0.0	0.01E	0.0	0.0	0.0		
11	0.0	0.0	0.32	0.0	0.0	0.0	0.0	0.07E	0.0	1.01	0.0	0.0		
12	0.0	0.0	0.0	0.0	0.01E	0.0	0.0	0.0	0.0	0.04	0.0	0.0		
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.21	0.0	0.31	0.0		
14	0.03E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
15	0.0	0.41	0.0	0.0	0.05E	0.0	0.0	0.0	0.0	0.0	0.0	0.13E		
16	0.0	0.0	0.37	0.02E	0.0	0.0	0.0	0.0	1.52	0.0	0.0	0.0		
17	0.0	0.0	0.19	0.0	0.0	0.0	0.0	0.0	0.12	0.0	0.0	0.0		
18	0.0	0.0	0.0	0.26	0.0	0.0	0.0	0.0	0.0	0.18	0.0	0.0		
19	0.0	0.0	0.03E	0.14	0.0	0.0	0.0	0.0	0.0	0.11	0.0	0.03E		
20	0.0	0.0	0.27	0.0	0.0	0.0	0.0	0.0	0.03E	0.0	0.0	0.13E		
21	0.0	0.0	0.19	0.0	0.0	0.0	0.0	0.0	0.11	0.0	0.0	0.04E		
22	0.0	0.0	0.0	0.0	0.17	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
23	0.0	0.23	0.0	0.0	0.03E	0.0	0.0	0.0	0.49	1.83	0.0	0.0		
24	0.0	1.85	0.0	0.0	0.07E	0.0	0.46E	0.0	0.0	0.0	0.0	0.0		
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.34	0.0	0.0	0.0		
26	0.0	0.0	0.0	0.0	0.25	0.0	0.0	0.0	0.62	0.0	0.0	0.0		
27	0.0	0.32	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
28	0.0	0.17	0.04E	0.0	0.86	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
29	0.0		0.0	0.0	0.0	0.0	0.0	0.89	0.0	0.0	0.0	0.0		
30	0.0		0.0	0.06E	0.62	0.0	0.0	0.02	0.0	0.0	0.0	0.53		
31	0.0		0.0		0.0		0.0	0.0		0.0		0.0		
TOTAL	0.82	4.67	5.09	2.66	2.15	0.41	0.46	1.05	5.65	3.33	0.36	0.86		
STA AV	1.95	3.50	3.04	3.86	3.43	4.04	1.15	1.85	3.04	3.71	3.52	2.65		

NOTES: For daily air temperatures in the vicinity, see table for Watershed C, p. 42.002-1. Precipitation values are from rain gage 89. Records began March 1938; discontinued July 1943; reestablished July 1, 1969, part-year amounts not included in averages. STA AV based on 6 yr period. Estimate codes may indicate that non-significant event totals are included.

1970 MEAN DAILY DISCHARGE (cfs) RIESEL (WACO), TEXAS SW-11												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.0	0.004	0.006	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	0.0	0.0	0.002	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3	0.0	0.0	0.063	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4	0.0	0.0	0.001	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	0.001	0.0	0.001	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6	0.0 T	0.0	0.070	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7	0.0	0.0	0.148	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8	0.0	0.0	0.002	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9	0.0	0.0	0.002	0.001	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10	0.0	0.0	0.0 T	0.0 T	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0 T	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0 T	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.0	0.001	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.0 T	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.001	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.001	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	0.0	0.0	0.0 T	0.0	0.0	0.0	0.0	0.0	0.0	0.0 T	0.0	0.0
24	0.0	0.079	0.001	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.001	0.001	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	0.0	0.0 T	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	0.0	0.001	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MEAN	0.0	0.0030	0.0097	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
INCHES	0.011	0.763	2.695	0.011	0.0	0.0	0.0	0.0	0.0	0.002	0.0	0.0
STA AV	0.235	0.542	0.782	0.083	0.275	1.012	0.113	0.0	0.375	0.445	1.213	0.590

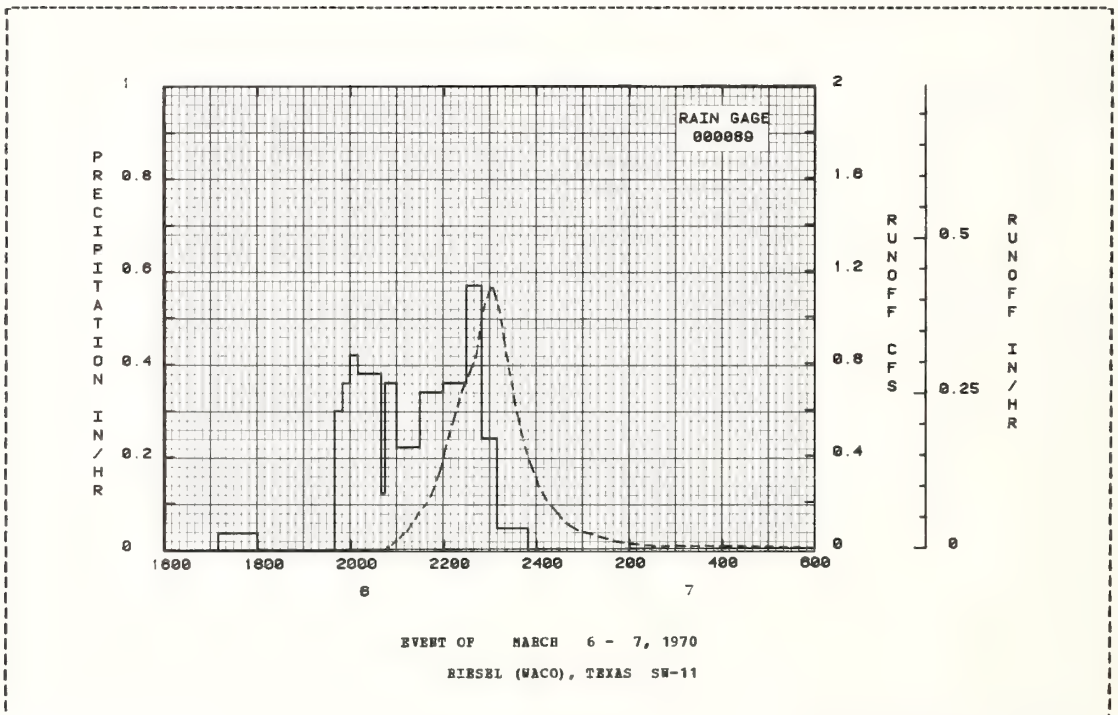
NOTES: To convert mean daily discharge in CFS to IN/DAY, multiply by 8.947990. Records began March 1938; discontinued July 1943; reestablished July 1, 1969, part-year amounts not included in averages. STA AV based on 6 yr period.

1970 SELECTED RUNOFF EVENT						RIESEL (WACO), TEXAS SW-11				
ANTECEDENT CONDITIONS			RAINFALL			RUNOFF				
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)
EVENT OF MARCH 6 - 7, 1970										
RG 000089			RG 000089							
3- 6	0.0	0.012	3- 6	1709	0.0	0.0	3- 6	2043	0.002	0.0
				1759	0.0360	0.03		2045	0.005	0.0
				1939	0.0	0.03		2047	0.009	0.0001
				1949	0.3000	0.08		2049	0.014	0.0002
				1959	0.3600	0.14		2053	0.023	0.0007
WATERSHED CONDITIONS: 100% winter growing Harding grass, 4 to 6 inches high, sparse cover.				2009	0.4200	0.21		2058	0.037	0.0016
				2039	0.3800	0.40		2103	0.050	0.0030
				2044	0.1200	0.41		2108	0.066	0.0048
				2049	0.3600	0.44		2113	0.085	0.0071
				2059	0.3600	0.50		2118	0.110	0.0101
				2129	0.2200	0.61		2123	0.128	0.0138
				2159	0.3400	0.78		2128	0.157	0.0182
				2229	0.3600	0.96		2133	0.183	0.0235
				2249	0.5700	1.15		2138	0.205	0.0295
				2309	0.2400	1.23		2143	0.229	0.0362
				2349	0.0450	1.26		2148	0.269	0.0439
								2153	0.318	0.0530
								2158	0.366	0.0636
								2203	0.446	0.0762
								2208	0.514	0.0911
								2213	0.564	0.1078
					2218	0.622	0.1262			
					2223	0.679	0.1465			
					2228	0.717	0.1682			
					2233	0.758	0.1911			
					2238	0.796	0.2153			
					2243	0.851	0.2409			
					2248	0.968	0.2691			
					2253	1.057	0.3006			
					2258	1.098	0.3340			
					2301	1.126	0.3547			
					2304	1.126	0.3757			
					2308	1.084	0.4032			
					2313	1.017	0.4358			
					2318	0.911	0.4657			

NOTES: To convert runoff in CFS to IN/HR, multiply by .372833.

1970	SELECTED RUNOFF EVENT			RIESEL (WACO), TEXAS SW-11						
ANTECEDENT CONDITIONS			RAINFALL			RUNOFF				
Date Mo-Day	Rainfall (inches)	Runoff (inches)	Date Mo-Day	Time of Day	Intensity (in/hr)	Acc. (inches)	Date Mo-Day	Time of Day	Rate (cfs)	Acc. (inches)
EVENT OF MARCH 6 - 7, 1970 (CONTINUED)										
							3- 6	2323	0.812	0.4925
								2328	0.722	0.5163
								2333	0.622	0.5372
								2338	0.543	0.5553
								2343	0.471	0.5710
								2348	0.414	0.5847
								2353	0.355	0.5967
								2400	0.301	0.6110
							3- 7	3	0.271	0.6163
								13	0.215	0.6314
								23	0.171	0.6434
								33	0.133	0.6528
								43	0.104	0.6602
								53	0.082	0.6660
								103	0.068	0.6707
								123	0.047	0.6778
								143	0.030	0.6826
								203	0.020	0.6857
								233	0.013	0.6888
								303	0.010	0.6909
								403	0.006	0.6939
								603	0.004	0.6976

NOTES: To convert runoff in CFS to IN/HR, multiply by .372833.



RIESEL (WACO), TEXAS WATERSHED SW-12

LOCATION: McLennan Co., Texas; 18 mi. SE of Waco; Brazos River Basin.

AREA: 2.97 acres

MONTHLY PRECIPITATION AND RUNOFF (inches)										RIESEL (WACO), TEXAS		WATERSHED SW-12			
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual	
1970	P	0.85	4.79	4.59	2.60	2.29	0.10	0.69	0.66	5.98	3.36	3.34	0.86	27.11	
	Q	0.137	2.175	3.407	0.686	0.0	0.0	0.0	0.0	0.004	0.008	0.0	0.0	6.417	
STA AV	P	2.08	2.76	2.31	3.96	3.87	3.60	1.47	2.04	2.70	2.74	2.83	2.27	32.64	
	Q	0.419	0.643	0.611	0.675	0.590	0.388	0.073	0.017	0.036	0.010	0.148	0.278	3.887	
ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS															
		Maximum Discharge Date		1 Hour Date	2 Hours Date	Maximum Volume for Selected Time Interval									
			Rate	Vol.	Vol.	6 Hours Date	12 Hours Date	1 Day Date	2 Days Date	8 Days Date					
						Vol.	Vol.	Vol.	Vol.	Vol.					
1970		2-24	1.150	2-24 0.654	2-24 0.851	2-24 1.107	2-24 1.231	3- 6 2.033	3- 6 2.068	2-27 3.188					
MAXIMUMS FOR PERIOD OF RECORD															
		3-29	4.000	3-29 3.070	3-29 3.830	3-29 4.620	3-29 4.800	3-29 5.340	3-29 5.390	4-15 8.530					
		1965		1965	1965	1965	1965	1965	1965	1957					

NOTES: Watershed conditions: 100% native grass meadow mowed annually for hay. For map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1956-59, USDA Misc. Pub. 945, p. 42.24-4. Precipitation and runoff records began Jan. 1, 1938; station not in operation July 1943 to June 1, 1947; part-year amounts not included in averages. Precipitation data obtained from rain gage 70. For long-time precipitation records, see National Weather Service records at Waco, Texas.

1970 DAILY PRECIPITATION (inches)													RIESEL (WACO), TEXAS WATERSHED SW-12	
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
1	0.0	1.42	0.35	0.02E	0.0	0.10E	0.0	0.0	0.75	0.0	0.06E	0.0		
2	0.0	0.0	0.10E	0.0	0.0	0.0	0.0	0.0	0.34	0.0	0.0	0.0		
3	0.07E	0.0	0.68	0.0	0.0	0.0	0.0	0.02E	0.0	0.0	0.0	0.0		
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0 E	0.0	0.0	0.0	0.0		
5	0.68	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
6	0.0	0.29	1.04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
7	0.0	0.0	1.11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.24	0.0	0.0		
9	0.0	0.0	0.0	2.03	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
10	0.06E	0.0	0.0	0.05	0.0	0.0	0.0	0.0	0.09E	0.0	0.0	0.0		
11	0.0	0.0	0.27	0.0	0.0	0.0	0.0	0.05E	0.0	0.83	0.0	0.0		
12	0.0	0.0	0.0	0.0	0.03E	0.0	0.0	0.0	0.10E	0.03	0.0	0.0		
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.21	0.0	0.28	0.0		
14	0.04E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
15	0.0	0.33	0.0	0.0	0.07E	0.0	0.0	0.0	0.0	0.0	0.0	0.15		
16	0.0	0.0	0.34	0.03E	0.0	0.0	0.0	0.0	1.79	0.0	0.0	0.0		
17	0.0	0.0	0.16	0.0	0.0	0.0	0.0	0.0	0.12	0.0	0.0	0.0		
18	0.0	0.0	0.0	0.24	0.0	0.0	0.0	0.0	0.0	0.20	0.0	0.0		
19	0.0	0.0	0.04E	0.13	0.0	0.0	0.0	0.0	0.0	0.08	0.0	0.0 E		
20	0.0	0.0	0.27	0.0	0.0	0.0	0.0	0.0	0.02E	0.0	0.0	0.14E		
21	0.0	0.0	0.18	0.0	0.0	0.0	0.12	0.0	0.13	0.0	0.0	0.06E		
22	0.0	0.0	0.0	0.0	0.12	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
23	0.0	0.29	0.0	0.0	0.05E	0.0	0.0	0.01E	0.48	1.98	0.0	0.0		
24	0.0	1.91	0.0	0.0	0.12	0.0	0.57	0.0	0.9	0.0	0.0	0.0		
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.27	0.0	0.0	0.0		
26	0.0	0.0	0.0	0.0	0.25	0.0	0.0	0.0	0.64	0.0	0.0	0.0		
27	0.0	0.41	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
28	0.0	0.14	0.05E	0.0	0.90	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.56	0.0	0.0	0.0	0.0		
30	0.0	0.0	0.0	0.10E	0.75	0.0	0.0	0.02	0.0	0.0	0.0	2.51		
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
TOTAL	0.85	4.79	4.59	2.60	2.29	0.10	0.69	0.66	5.98	3.36	0.34	0.86		
STA AV	2.08	2.76	2.31	3.96	3.87	3.60	1.47	2.04	2.70	2.74	2.83	2.27		

NOTES: For daily air temperatures in the vicinity, see table for Watershed C, p. 42.002-1. Precipitation values are from rain gage 70. Records began Jan. 1, 1938; station not in operation July 1943 to June 1, 1947; part-year amounts not included in averages. STA AV based on 28 yr period. Estimate codes may indicate that non-significant event totals are included.

1970 MEAN DAILY DISCHARGE (cfs) HIESSEL (WACO), TEXAS WATERSHED SW-12												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.0	0.052	0.030	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	0.0 T	0.002	0.011	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3	0.0	0.0 T	0.065	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4	0.0	0.0	0.001	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	0.011	0.0	0.001	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6	0.003	0.001	0.108	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7	0.001	0.001	0.142	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8	0.001	0.001	0.003	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9	0.0 T	0.0 T	0.0 T	0.075	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10	0.0	0.0	0.0	0.008	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11	0.0	0.0	0.002	0.0 T	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	0.0	0.0	0.001	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13	0.0	0.0	0.0 T	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.001	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0 T	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.0	0.017	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	0.0	0.0	0.001	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	0.0	0.0	0.001	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.004	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.023	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.001	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	0.0	0.0 T	0.0 T	0.0	0.0	0.0	0.0	0.0	0.0	0.001	0.0	0.0
24	0.0	0.166	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.007	0.0	0.0	0.0	0.0	0.0	0.0	0.0 T	0.0	0.0	0.0
26	0.0	0.001	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	0.0	0.011	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	0.0	0.021	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MEAN	0.0005	0.0095	0.0134	0.0028	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
INCHES	0.137	2.175	3.407	0.686	0.0	0.0	0.0	0.0	0.004	0.008	0.0	0.0
STA AV	0.419	3.643	6.611	0.575	0.593	0.388	0.073	0.017	0.036	0.010	0.148	0.278

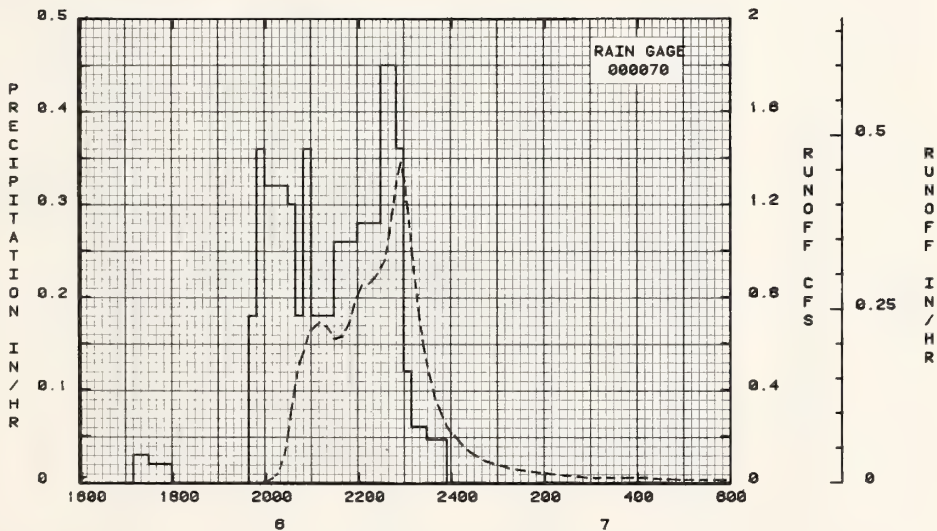
NOTES: To convert mean daily discharge in CFS to IN/DAY, multiply by 8.014025. Records began Jan. 1, 1938; station not in operation July 1943 to June 1, 1947; part-year amounts not included in averages. STA AV based on 28 yr period.

1970 SELECTED RUNOFF EVENT HIESSEL (WACO), TEXAS WATERSHED SW-12												
ANTECEDENT CONDITIONS				RAINFALL				RUNOFF				
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.		
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)		
EVENT OF MARCH 6 - 7, 1970												
RG 000070												
3- 6 0.0 0.005 3- 6												
1708 0.0 0.0 1939 0.002 0.0												
1728 0.0300 0.01 1949 0.004 0.0002												
1758 0.0200 0.02 2004 0.012 0.0009												
1938 0.0 0.02 2009 0.020 0.0014												
1948 0.1800 0.05 2012 0.032 0.0018												
WATERSHED CONDITIONS:												
100% native grass meadow,												
12 to 14 inches, dormant.												
1958 0.3600 0.11 2015 0.044 0.0025												
2028 0.3200 0.27 2018 0.061 0.0034												
2038 0.3000 0.32 2021 0.091 0.0047												
2048 0.1800 0.35 2024 0.120 0.0065												
2058 0.3600 0.41 2026 0.154 0.0081												
2128 0.1800 0.50 2028 0.199 0.0101												
2158 0.2600 0.63 2030 0.241 0.0126												
2228 0.2800 0.77 2032 0.291 0.0156												
2248 0.4500 0.92 2034 0.344 0.0192												
2258 0.3600 0.98 2036 0.381 0.0233												
2308 0.1200 1.00 2038 0.418 0.0279												
2328 0.0600 1.02 2041 0.478 0.0355												
2354 0.0462 1.04 2044 0.519 0.0440												
2049 0.573 0.0596												
2054 0.629 0.0767												
2059 0.664 0.0951												
2109 0.691 0.1337												
2119 0.669 0.1725												
2129 0.622 0.2093												
2139 0.629 0.2450												
2149 0.704 0.2830												
2154 0.774 0.3040												
2204 0.848 0.3502												
2214 0.856 0.3987												
2224 0.905 0.4489												
2234 0.965 0.5022												
2239 1.071 0.5312												
2244 1.179 0.5632												
2249 1.300 0.5966												
2254 1.380 0.6368												

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.333918.

1970	SELECTED RUNOFF EVENT			RIBSEL (WACO), TEXAS WATERSHED SW-12						
ANTECEDENT CONDITIONS			RAINFALL				RUNOFF			
Date Mo-Day	Rainfall (inches)	Runoff (inches)	Date Mo-Day	Time of Day	Intensity (in/hr)	Acc. (inches)	Date Mo-Day	Time of Day	Rate (cfs)	Acc. (inches)
EVENT OF MARCH 6 - 7, 1970 (CONTINUED)										
							3- 6	2259	1.296	0.6749
								2304	1.161	0.7100
								2309	0.987	0.7406
								2314	0.837	0.7666
								2319	0.699	0.7885
								2324	0.591	0.8069
								2329	0.501	0.8224
								2334	0.430	0.8357
								2339	0.363	0.8470
								2344	0.320	0.8567
								2349	0.277	0.8652
								2354	0.243	0.8726
								2400	0.211	0.8804
							3- 7	4	0.198	0.8851
								14	0.160	0.8953
								24	0.128	0.9035
								34	0.108	0.9102
								44	0.091	0.9159
								54	0.078	0.9207
								114	0.056	0.9283
								134	0.045	0.9341
								154	0.038	0.9388
								224	0.030	0.9446
								254	0.023	0.9491
								354	0.016	0.9558
								454	0.011	0.9604
								554	0.007	0.9635

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.333918.



EVENT OF MARCH 6 - 7, 1970

RIESEL (WACO), TEXAS WATERSHED SW-12

RIESEL (WACO), TEXAS WATERSHED SW-17

LOCATION: Falls Co., Texas; 19 mi. SE of Waco; Brazos River Basin.

AREA: 2.99 acres

MONTHLY PRECIPITATION AND RUNOFF (inches)													RIESEL (WACO), TEXAS WATERSHED SW-17	
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
1970	P	0.84	4.75	4.85	2.58	2.07	0.38	0.20	1.12	5.74	3.23	0.33	0.79	26.88
	Q	0.022	1.821	3.677	0.970	0.0	0.0	0.0	0.0	0.011	0.169	0.0	0.0	6.671
STA AV	P	1.97	2.82	2.35	4.12	3.80	3.50	1.52	2.20	2.80	2.94	2.34	2.34	33.32
	Q	0.403	0.666	0.722	0.998	0.819	0.749	0.181	0.071	0.177	0.169	0.466	0.485	5.907
ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS														
Maximum Volume for Selected Time Interval														
	Maximum Discharge Date	1 Hour Rate	1 Hour Date	2 Hours Vol.	2 Hours Date	6 Hours Vol.	6 Hours Date	12 Hours Vol.	12 Hours Date	1 Day Vol.	1 Day Date	2 Days Vol.	2 Days Date	6 Days Vol.
1970	2-24	0.504	2-24	0.437	2-24	0.673	3-7	1.154	3-7	1.326	3-6	2.228	3-6	2.328
MAXIMUMS FOR PERIOD OF RECORD														
	10-31 1940	7.060	4-19 1957	2.540	4-19 1957	2.960	4-23 1957	3.310	3-29 1965	3.520	3-29 1965	4.250	11-22 1940	5.370
													4-19 1957	9.420

NOTES: Watershed conditions: 100% Bermudagrass pasture. For map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1956-59, USDA Misc. Pub. 945, p. 42.28-5. Precipitation and runoff record began Feb. 1, 1939; station not in operation July 1943 to Jan. 1, 1948; part-year amounts not included in averages. Precipitation data obtained from rain gage W-2. For long-time precipitation records, see National Weather Service records at Waco, Texas.

1970 DAILY PRECIPITATION (inches)													RIESEL (WACO), TEXAS WATERSHED SW-17	
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
1	0.0	1.35	0.34	0.02E	0.05E	0.38	0.0	0.0	0.61	0.0	0.04E	0.0		
2	0.0	0.0	0.06E	0.0	0.0	0.0	0.0	0.0	0.35	0.0	0.0	0.0		
3	0.09E	0.0	0.82	0.0	0.0	0.0	0.0	0.06E	0.0	0.0	0.0	0.0		
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.09E	0.0	0.0	0.0	0.0		
5	0.66	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
6	0.0	0.32	1.18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
7	0.0	0.0	1.25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.16	0.0	0.0		
9	0.0	0.0	0.0	2.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
10	0.06E	0.0	0.0	0.05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
11	0.0	0.0	0.20	0.0	0.0	0.0	0.0	0.04E	0.0	1.03	0.0	0.0		
12	0.0	0.0	0.0	0.0	0.02E	0.0	0.0	0.05E	0.05E	1.04	0.0	0.0		
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.23	0.0	0.29	0.0		
14	0.03E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
15	0.0	0.40	0.0	0.0	0.05E	0.0	0.0	0.0	0.0	0.0	0.0	0.12E		
16	0.0	0.0	0.40	0.03E	0.0	0.0	0.0	0.0	1.45	0.0	0.0	0.0		
17	0.0	0.0	0.12	0.0	0.0	0.0	0.0	0.0	0.13	0.0	0.0	0.0		
18	0.0	0.0	0.0	0.27	0.0	0.0	0.0	0.0	0.0	0.21	0.0	0.0		
19	0.0	0.0	0.03E	0.13	0.0	0.0	0.0	0.0	0.0	0.07	0.0	0.02E		
20	0.0	0.0	0.25	0.0	0.0	0.0	0.0	0.0	0.03E	0.0	0.0	0.10E		
21	0.0	0.0	0.16	0.0	0.0	0.0	0.10E	0.0	0.11	0.0	0.0	0.06E		
22	0.0	0.0	0.0	0.0	0.18	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
23	0.0	0.31	0.0	0.0	0.0	0.0	0.0	0.0	0.48	1.72	0.0	0.0		
24	0.0	1.83	0.0	0.0	0.14	0.0	0.10E	0.0	0.0	0.0	0.0	0.0		
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.48	0.0	0.0	0.0		
26	0.0	0.0	0.0	0.0	0.25	0.0	0.0	0.0	0.62	0.0	0.0	0.0		
27	0.0	0.39	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
28	0.0	0.15	0.04E	0.0	0.78	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.90	0.0	0.0	0.0	0.0		
30	0.0	0.0	0.0	0.08E	0.56	0.0	0.0	0.03	0.0	0.0	0.0	0.49		
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
TOTAL	0.84	4.75	4.85	2.58	2.07	0.38	0.20	1.12	5.74	3.23	0.33	0.79		
STA AV	1.97	2.82	2.35	4.12	3.80	3.50	1.52	2.20	2.80	2.98	2.34	2.34		

NOTES: For daily air temperatures in the vicinity, see table for Watershed C, p. 42.002-1. Precipitation values are from rain gage W-2. Records began Feb. 1, 1939; station not in operation July 1943 to Jan. 1, 1948; part-year amounts not included in averages. STA AV based on 26 yr period. Estimate codes may indicate that non-significant event totals are included.

1970 MEAN DAILY DISCHARGE (cfs) RIESEL (WACO), TEXAS WATERSHED SW-17												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.0	0.046	0.024	0.001	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	0.0	0.001	0.006	0.001	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3	0.0	0.001	0.086	0.001	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4	0.0	0.001	0.002	0.0 T	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	0.003	0.001	0.001	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6	0.0 T	0.002	0.088	0.001	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7	0.0	0.001	0.200	0.001	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8	0.0	0.0 T	0.007	0.001	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9	0.0	0.0	0.001	0.094	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10	0.0	0.0	0.0 T	0.016	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11	0.0	0.0	0.0 T	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	0.0	0.0 T	0.001	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13	0.0	0.0 T	0.001	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	0.0	0.0	0.001	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.001	0.001	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.002	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.0	0.005	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	0.0	0.0	0.001	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	0.0	0.0	0.001	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.001	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.011	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.001	0.0 T	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	0.0	0.0	0.001	0.001	0.0	0.0	0.0	0.0	0.0	0.021	0.0	0.0
24	0.0	0.148	0.001	0.001	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.006	0.001	0.0 T	0.0	0.0	0.0	0.0	0.001	0.0	0.0	0.0
26	0.0	0.0 T	0.001	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	0.0	0.004	0.001	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	0.0	0.015	0.0 T	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	0.0	0.0	0.0 T	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	0.0	0.0	0.001	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	0.0	0.0	0.001	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MEAN	0.0001	0.0082	0.0149	0.0041	0.0	0.0	0.0	0.0	0.0	0.0007	0.0	0.0
INCHES	0.022	1.821	3.677	0.970	0.0	0.0	0.0	0.0	0.011	0.169	0.0	0.0
STA AV	0.403	0.666	0.722	0.998	0.819	0.749	0.181	0.071	0.177	0.169	0.466	0.485

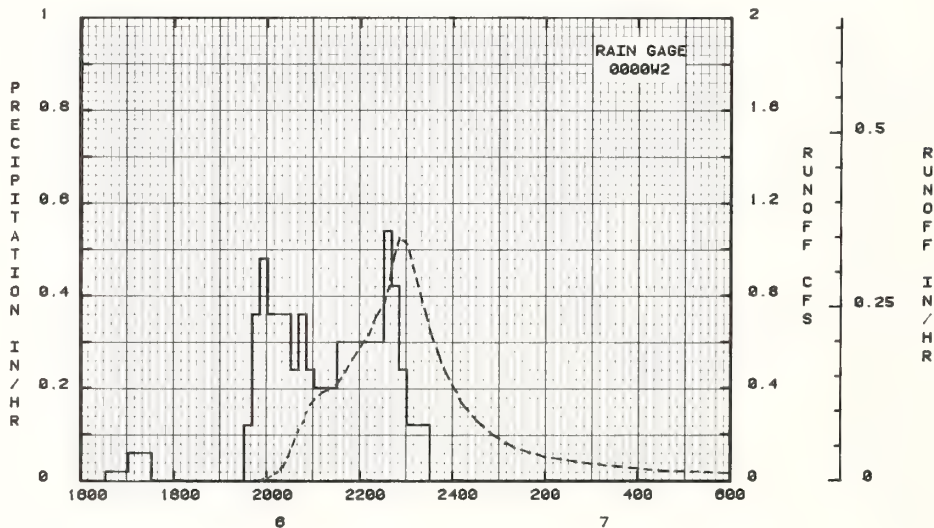
NOTES: To convert mean daily discharge in CFS to IN/DAY, multiply by 7.960419. Records began Feb. 1, 1939; station not in operation July 1943 to Jan. 1, 1948; part-year amounts not included in averages. STA AV based on 26 yr period.

1970			SELECTED RUNOFF EVENT				RIESEL (WACO), TEXAS WATERSHED SW-17					
ANTECEDENT CONDITIONS			RAINFALL				RUNOFF					
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.		
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)		
EVENT OF MARCH 6 - 7, 1970												
3- 6	EG 0000W2 0.0	0.009	3- 6	EG 0000W2 1631	0.0	0.0	3- 6	1944	0.002	0.0		
				1701	0.0200	0.01		1946	0.003	0.0		
				1731	0.0600	0.04		1951	0.004	0.0001		
				1931	0.0	0.04		1956	0.006	0.0002		
				1941	0.1200	0.06		2001	0.005	0.0004		
WATERSHED CONDITIONS: 100% Bermudagrass pasture, 4 to 6 inches high, dormant.				1951	0.3600	0.12		2006	0.015	0.0007		
				2001	0.4800	0.20		2011	0.027	0.0013		
				2031	0.3600	0.38		2014	0.036	0.0018		
				2041	0.2400	0.42		2017	0.049	0.0025		
				2051	0.3600	0.48		2019	0.058	0.0031		
				2101	0.2400	0.52		2021	0.065	0.0038		
				2131	0.2000	0.62		2024	0.081	0.0050		
				2201	0.3000	0.77		2027	0.103	0.0065		
				2231	0.3000	0.92		2030	0.127	0.0084		
				2241	0.5400	1.01		2033	0.154	0.0107		
				2251	0.4200	1.08		2036	0.182	0.0135		
				2301	0.2400	1.12		2040	0.206	0.0178		
				2331	0.1200	1.18		2041	0.222	0.0190		
								2046	0.245	0.0255		
								2048	0.256	0.0283		
					2050	0.287	0.0313					
					2052	0.303	0.0345					
					2056	0.329	0.0415					
					2101	0.351	0.0509					
					2111	0.383	0.0712					
					2121	0.400	0.0929					
					2131	0.423	0.1157					
					2141	0.470	0.1404					
					2151	0.529	0.1680					
					2201	0.581	0.1987					
					2211	0.635	0.2323					
					2221	0.710	0.2695					
					2226	0.744	0.2896					
					2231	0.757	0.3104					
					2236	0.816	0.3321					

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.331684.

1970	SELECTED RUNOFF EVENT					RIESEL (WACO), TEXAS WATERSHED SW-17				
ANTECEDENT CONDITIONS			RAINFALL			RUNOFF				
Date Mo-Day	Rainfall (inches)	Runoff (inches)	Date Mo-Day	Time of Day	Intensity (in/hr)	Acc. (inches)	Date Mo-Day	Time of Day	Rate (cfs)	Acc. (inches)
EVENT OF MARCH 6 - 7, 1970 (CONTINUED)										
							3- 6	2238	0.843	0.3413
								2241	0.917	0.3558
								2246	0.992	0.3822
								2251	1.045	0.4103
								2256	1.042	0.4391
								2301	1.022	0.4677
								2306	0.965	0.4951
								2311	0.901	0.5209
								2316	0.840	0.5450
								2321	0.773	0.5673
								2326	0.720	0.5879
								2331	0.652	0.6069
								2336	0.604	0.6242
								2341	0.558	0.6402
								2346	0.509	0.6550
								2351	0.468	0.6685
								2356	0.437	0.6810
								2400	0.410	0.6904
							3- 7	6	0.375	0.7034
								11	0.344	0.7133
								21	0.302	0.7312
								31	0.259	0.7467
								41	0.228	0.7601
								51	0.199	0.7719
								101	0.176	0.7823
								111	0.161	0.7916
								121	0.144	0.8000
								141	0.124	0.8148
								201	0.104	0.8274
								221	0.089	0.8381
								241	0.085	0.8477
								301	0.072	0.8564
								331	0.061	0.8674
								401	0.050	0.8766
								431	0.042	0.8842
								501	0.037	0.8908
								601	0.027	0.9014

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.331684.



EVENT OF MARCH 6 - 7, 1970

RIESEL (WACO), TEXAS WATERSHED SW-17

FIESEL (WACO), TEXAS WATERSHED SW-19

LOCATION: Falls County, Texas; 18 miles southeast of Waco; Brazos River Basin.

AREA: 3.25 acres

SLOPES: Slope-Percent 0-3
Percent of area 100.0

SOILS: Residual; moderately deep fine textured, granular, slowly permeable, alkaline throughout, slow internal drainage, Houston clay - 100%.

EROSION: Erosion Class + 1 2 3 4 5
Percent of Area 0.0 0.0 100.0 0.0 0.0 0.0

LAND CAPABILITY: Class I II III IV V VI VII VIII
Percent of Area 0.0 0.0 0.0 0.0 100.0 0.0 0.0 0.0

GEOLOGY: The watershed is underlain by marls and chalks belonging to the Taylor group of the Gulf series of the Cretaceous system. The formations dip east-southeast at an angle a little steeper than the general slope of the land surface. For additional data see: Blank, H. R., et al., Geology of the Blacklands Experimental Watershed, near Waco, Texas, Bureau of Economic Geology, Univ. of Texas, Report No. 12, March, 1952.

SURFACE DRAINAGE: Good, no well defined drainageway by poorly defined natural depressions.

CHARACTER OF FLOW: Ephemeral, continuous.

INSTRUMENTATION: Runoff: Type H-3 flume near center of each dike 425 ft. long across slope to intercept and concentrate runoff. Precipitation: One weighing-recording rain gage.

WATERSHED CONDITIONS: 100% rangeland grasses of mixed species with moderate infestation of honey mesquite.

GENERALLY REPRESENTS: Rangeland areas in the Blackland Prairies and Coastal Plains of Texas infested with mesquite and other brush species.

MONTHLY PRECIPITATION AND RUNOFF (inches)								FIESZL (WACO), TEXAS WATERSHED SW-19								
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual			
1970	P	2.0	0.0	0.0	0.0	0.0	0.0	0.87	6.31	4.02	0.33	0.87	12.40			
	Q	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.000	0.022	0.0	0.0	0.023			
STA AV	P	0.00	0.00	0.00	0.00	0.00	0.00	0.87	6.31	4.02	0.33	0.87	12.40			
	Q	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.000	0.022	0.0	0.0	0.023			
ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																
	Maximum Discharge		1 Hour		2 Hours		Maximum Volume for Selected Time Interval									
	Date	Rate	Date	Vol.	Date	Vol.	Date	6 Hours Vol.	Date	12 Hours Vol.	Date	1 Day Vol.	Date	2 Days Vol.	8 Days Vol.	
1970	10-23	0.048	10-23	0.022	10-23	0.022	10-23	0.022	10-23	0.022	10-22	0.022	10-21	0.022	10-15	0.022
MAXIMUMS FOR PERIOD OF RECORD																
	10-23	0.048	10-23	0.022	10-23	0.022	10-23	0.022	10-23	0.022	10-22	0.022	10-21	0.022	10-15	0.022
	1970		1970		1970		1970		1970		1970		1970		1970	

NOTES: Watershed conditions: Same as described in previous section under WATERSHED CONDITIONS. Precipitation and runoff records began September 1, 1970. Precipitation data obtained from rain gage 56B. For long-time precipitation records, see National Weather Service records at Waco, Texas.

1970	DAILY PRECIPITATION (inches)					RIESEL (WACO), TEXAS WATERSHED SW-19							
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.76	0.0	0.07E	0.0	
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.42	0.0	0.0	0.0	
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.79	0.0	0.0	
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.26	0.0	0.0	0.0	
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.96	0.0	0.0	
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.09E	0.04	0.0	0.0	
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.11E	0.0	0.26	0.0	
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.10E	0.0	0.0	0.10E	
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.90	0.0	0.0	0.0	
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.27	0.0	0.0	0.0	
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.16	0.0	0.0	
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.05	0.0	0.06E	
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.02E	0.0	0.0	0.13E	
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.05E	0.0	0.0	0.03E	
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.57	1.98	0.0	0.0	
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.19	0.0	0.0	0.0	
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.57	0.0	0.0	0.0	
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.79	0.0	0.0	0.0	0.0	
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.08	0.0	0.0	0.0	0.55	
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
TOTAL	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.87	6.31	4.02	0.33	0.87	
STA AV	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.87	6.31	4.02	0.33	0.87	

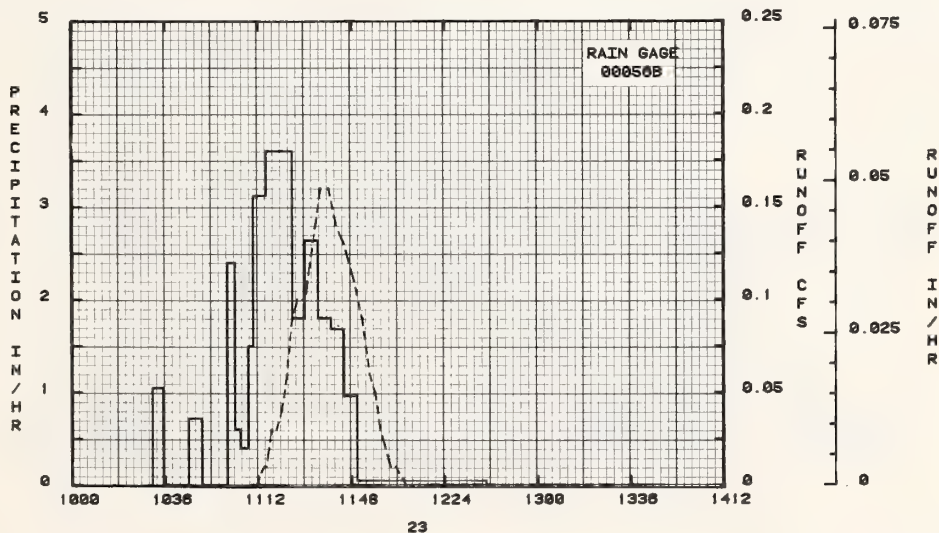
NOTES: For daily air temperature in the vicinity, see table for Watershed C, p. 42.002-1. Precipitation values are from rain gage 56B. Records began September 1, 1970. STA AV based on 1 yr record period. Estimate codes may indicate that non-significant event totals are included.

1970	MEAN DAILY DISCHARGE (cfs)					RIESEL (WACO), TEXAS WATERSHED SW-19							
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.003	0.0	0.0	
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
MEAN	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0001	0.0	0.0	
INCHES	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.000	0.022	0.0	0.0	
STA AV	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.000	0.022	0.0	0.0	

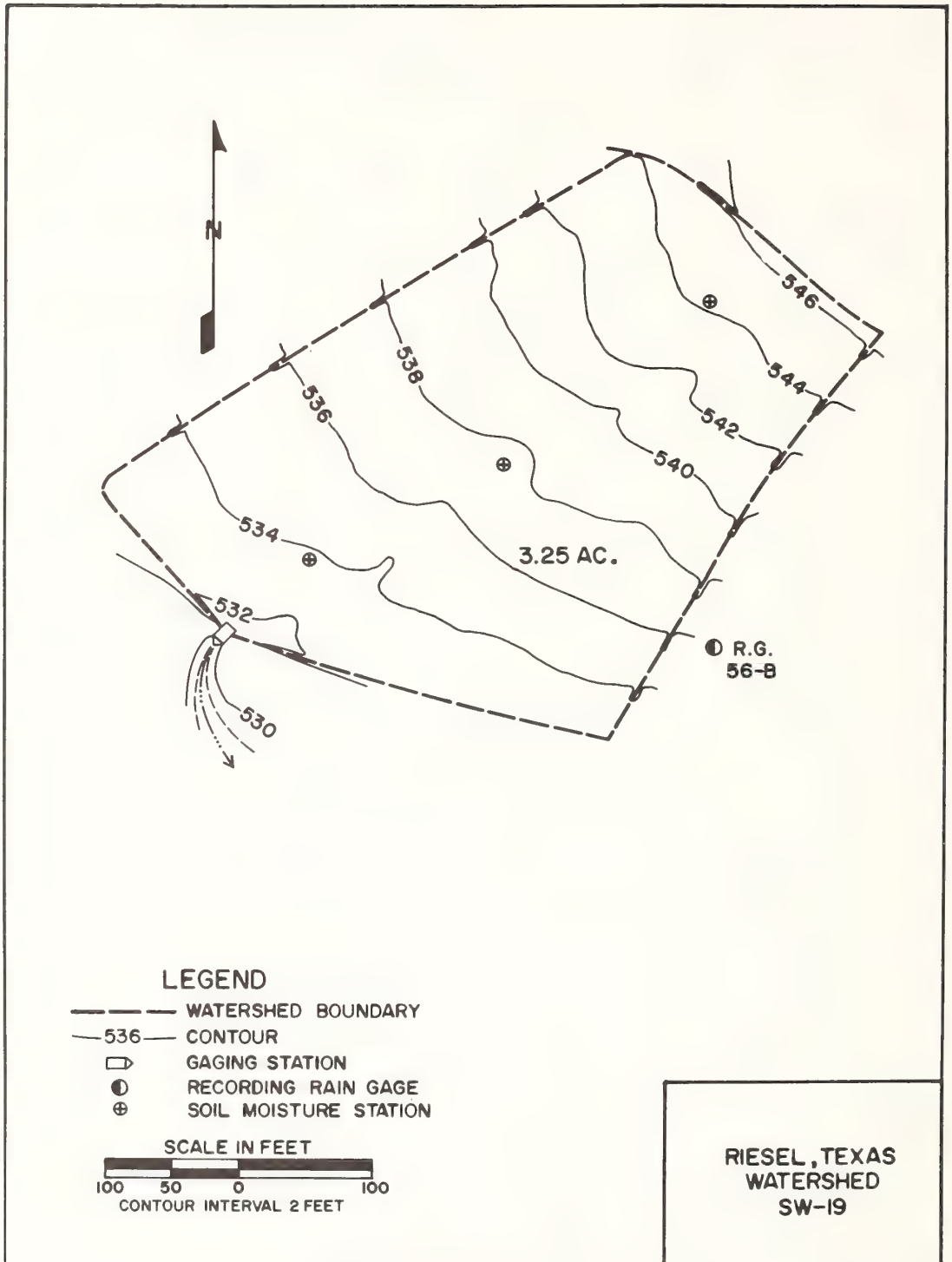
NOTES: To convert mean daily discharge in CFS to IN/DAY, multiply by 7.323585. Records began September 1, 1970. STA AV based on 1 yr record period.

1970 SELECTED RUNOFF EVENT			RIESEL (WACO), TEXAS WATERSHED SW-19							
ANTECEDENT CONDITIONS			RAINFALL				RUNOFF			
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)
EVENT OF OCTOBER 23, 1970										
10-23	RG 00056B 0.0	0.0	10-23	RG 00056B			10-23			
				1031	0.0	0.0		1109	0.0	0.0
				1035	1.0500	0.07		1110	0.001	0.0
				1045	0.0	0.07		1111	0.004	0.0
				1050	0.7200	0.13		1114	0.008	0.0001
				1100	0.0	0.13		1115	0.012	0.0002
WATERSHED CONDITIONS:										
100% rangeland grasses, 4 to				1103	2.4000	0.25	1116	0.018	0.0003	
6 inches tall, with moderate				1105	0.6000	0.27	1117	0.027	0.0004	
infestation of honey mesquite.				1108	0.4000	0.29	1119	0.032	0.0007	
				1110	1.5000	0.34	1121	0.037	0.0010	
				1115	3.1200	0.60	1123	0.061	0.0015	
				1120	3.6000	0.90	1125	0.087	0.0022	
				1125	3.6000	1.20	1127	0.095	0.0032	
				1130	1.8000	1.35	1129	0.097	0.0041	
				1135	2.6400	1.57	1130	0.095	0.0047	
				1140	1.8000	1.72	1131	0.107	0.0052	
				1145	1.6800	1.86	1132	0.121	0.0057	
				1150	0.9600	1.94	1134	0.145	0.0071	
				1240	0.0480	1.98	1136	0.156	0.0085	
							1139	0.156	0.0109	
							1142	0.139	0.0132	
							1145	0.129	0.0153	
							1147	0.121	0.0165	
							1149	0.108	0.0177	
							1152	0.087	0.0191	
							1155	0.058	0.0202	
							1157	0.046	0.0208	
							1159	0.033	0.0212	
							1201	0.023	0.0215	
							1203	0.014	0.0217	
							1205	0.010	0.0218	
							1209	0.004	0.0219	
							1211	0.002	0.0219	
							1214	0.001	0.0219	
							1219	0.0	0.0219	
							1329	0.0	0.0219	

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.305149.



EVENT OF OCTOBER 23, 1970
RIESEL (WACO), TEXAS WATERSHED SW-19



RIESEL (WACO), TEXAS WATERSHED SW-20

LOCATION: Falls County, Texas; 18 miles southeast of Waco; Brazos River Basin.

AREA: 3.21 acres

SLOPES: Slope-Percent 0-3
Percent of area 100.0

SOILS: Residual; moderately deep, fine textured, granular, slowly permeable, alkaline throughout, slow internal drainage, Houston clay - 100%.

EROSION: Erosion Class + 1 2 3 4 5
Percent of Area 0.0 0.0 100.0 0.0 0.0 0.0

LAND CAPABILITY: Class I II III IV V VI VII VIII
Percent of Area 0.0 0.0 0.0 0.0 100.0 0.0 0.0 0.0

GEOLOGY: The watershed is underlain by marls and chalks belonging to the Taylor group of the Gulf series of the Cretaceous system. The formations dip east-southeast at an angle a little steeper than the general slope of the land surface. For additional data see: Blank, H. R., et al., Geology of the Blacklands Experimental Watershed, near Waco, Texas, Bureau of Economic Geology, Univ. of Texas, Report No. 12, March, 1952.

SURFACE DRAINAGE: Good, no well defined drainageways, drainage by poorly defined natural depressions.

CHARACTER OF FLOW: Ephemeral, continuous.

INSTRUMENTATION: Runoff: Type H-3 flume near center of each dike 425 ft. long across slope to intercept and concentrate runoff. Precipitation: One weighing-recording rain gage.

WATERSHED CONDITIONS: 100% rangeland grasses of mixed species with moderate infestation of honey mesquite.

GENERALLY REPRESENTS: Rangeland areas in the Blackland Prairies and Coastal Plains of Texas infested with mesquite and other brush species.

MONTHLY PRECIPITATION AND RUNOFF (inches)						RIESEL (WACO), TEXAS WATERSHED SW-20										
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual			
1970	P	0.0	0.0	0.0	0.0	0.0	0.0	0.87	6.31	4.02	0.33	0.87	12.40			
	Q	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.004	0.083	0.0	0.0	0.087			
STA AV	P	0.00	0.00	0.00	0.00	0.00	0.00	0.87	6.31	4.02	0.33	0.87	12.40			
	Q	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.004	0.083	0.0	0.0	0.087			
ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																
	Maximum Discharge		1 Hour		2 Hours		Maximum Volume for Selected Time		Interval		2 Days		8 Days			
	Date	Rate	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.		
1970	10-23	0.161	10-23	0.078	10-23	0.080	10-23	0.080	10-23	0.080	10-22	0.080	10-21	0.080	10-15	0.080
MAXIMUMS FOR PERIOD OF RECORD																
	10-23	0.161	10-23	0.078	10-23	0.080	10-23	0.080	10-23	0.080	10-22	0.080	10-21	0.080	10-15	0.080
	1970		1970		1970		1970		1970		1970		1970		1970	

NOTES: Watershed conditions: Same as described in previous section under WATERSHED CONDITIONS. Precipitation and runoff records began September 1, 1970. Precipitation data obtained from rain gage 568. For long-time precipitation records, see National Weather Service records at Waco, Texas.

1970	DAILY PRECIPITATION (inches)					RIESEL (WACO), TEXAS WATERSHED SW-20						
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.76	0.0	0.07E	0.0
2	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.42	0.0	0.0	0.0
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.79	0.0	0.0
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.26	0.0	0.0	0.0
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.96	0.0	0.0
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.09E	0.04	0.0	0.0
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.11E	0.0	0.26	0.0
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.10E	0.0	0.0	0.10E
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.90	0.0	0.0	0.0
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.27	0.0	0.0	0.0
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.16	0.0	0.0
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.09	0.0	0.06E
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.02E	0.0	0.0	0.13E
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.05E	0.0	0.0	0.03E
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.57	1.98	0.0	0.0
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.19	0.0	0.0	0.0
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.57	0.0	0.0	0.0
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.79	0.0	0.0	0.0	0.0
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.08	0.0	0.0	0.0	0.55
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.87	6.31	4.02	0.33	0.87
STA AV	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.87	6.31	4.02	0.33	0.87

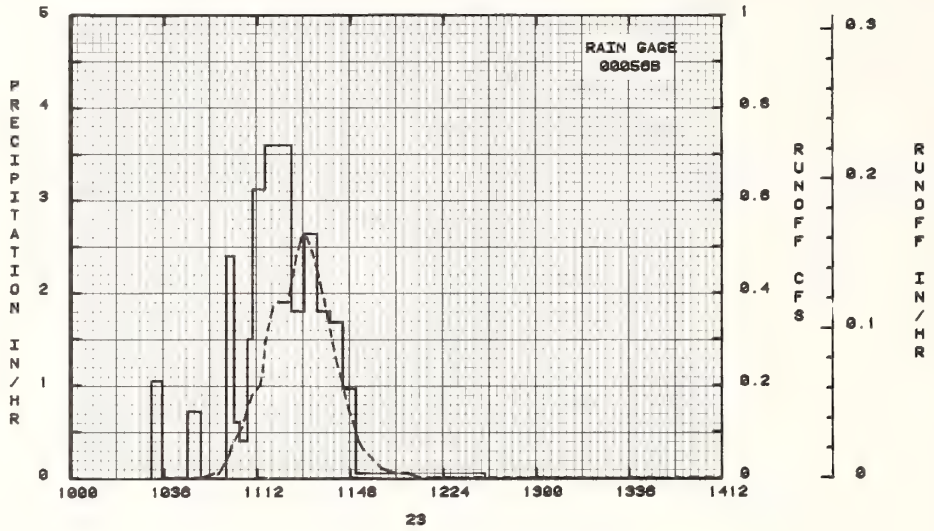
NOTES: For daily air temperature in the vicinity, see table for Watershed C, p. 42.002-1. Precipitation values are from rain gage 56B. Records began September 1, 1970. STA AV based on 1 yr record period. Estimate codes may indicate that non-significant event totals are included.

1970	MEAN DAILY DISCHARGE (cfs)					RIESEL (WACO), TEXAS WATERSHED SW-20						
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.011	0.0	0.0
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.001	0.0	0.0	0.0
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MEAN	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0004	0.0	0.0
INCHES	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.004	0.083	0.0	0.0
STA AV	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.004	0.083	0.0	0.0

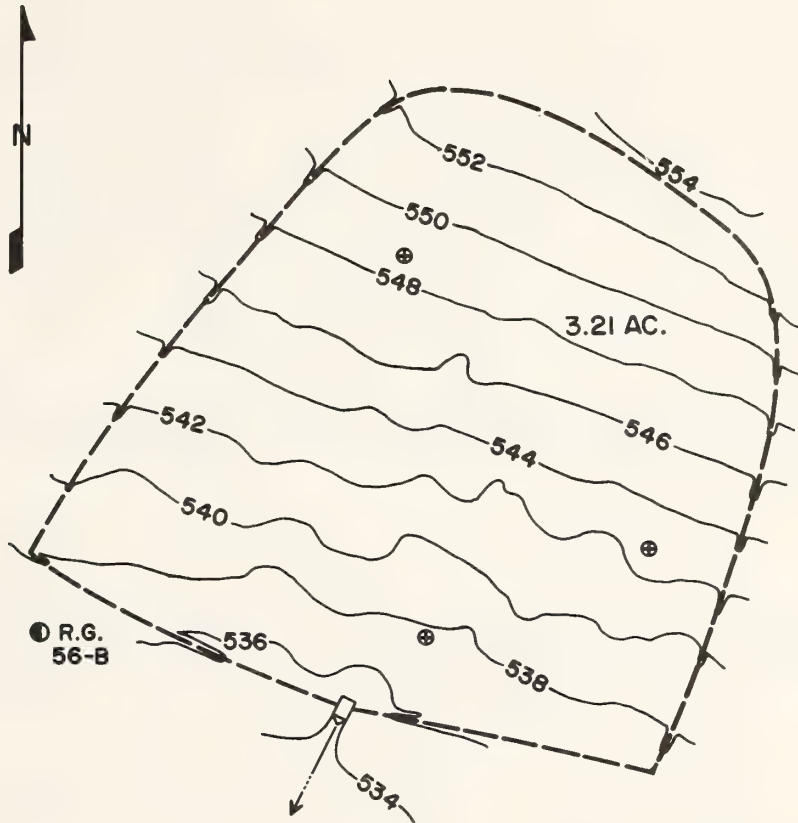
NOTES: To convert mean daily discharge in CFS to IN/DAY, multiply by 7.414845. Records began September 1, 1970. STA AV based on 1 yr record period.

1970			RIESEL (WACO), TEXAS WATERSHED SW-20								
SELECTED RUNOFF EVENT											
ANTECEDENT CONDITIONS			RAINFALL				RUNOFF				
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.	
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)	
EVENT OF OCTOBER 23, 1970											
RG 00056B			FG 00056B								
10-23	0.0	0.0	10-23	1031	0.0	0.0	10-23	1040	0.0	0.0	
				1035	1.0500	0.07		1045	0.0	0.0	
				1045	0.0	0.07		1050	0.0	0.0	
				1050	0.7200	0.13		1055	0.010	0.0001	
				1100	0.0	0.13		1057	0.010	0.0002	
WATERSHED CONDITIONS: 100% rangeland grasses, 4 to 6 inches tall, with moderate infestation of honey mesquite.				1103	2.4000	0.25		1059	0.030	0.0004	
				1105	0.6700	0.27		1101	0.050	0.0008	
				1108	0.4000	0.29		1102	0.070	0.0011	
				1110	1.5900	0.34		1104	0.090	0.0020	
				1115	3.1200	0.60		1106	0.110	0.0030	
				1120	3.6000	0.90		1108	0.150	0.0044	
				1125	3.6300	1.20		1110	0.180	0.0060	
				1130	1.8000	1.35		1113	0.200	0.0090	
				1135	2.6400	1.57		1114	0.230	0.0100	
				1140	1.8000	1.72		1115	0.290	0.0116	
				1145	1.6800	1.86		1117	0.350	0.0147	
				1150	0.9600	1.94		1118	0.370	0.0164	
				1240	0.0480	1.98		1120	0.380	0.0205	
								1124	0.380	0.0284	
								1125	0.420	0.0303	
								1127	0.480	0.0352	
								1129	0.520	0.0400	
								1131	0.520	0.0456	
					1133	0.490	0.0505				
					1135	0.450	0.0556				
					1137	0.400	0.0597				
					1139	0.350	0.0638				
					1141	0.290	0.0669				
					1143	0.240	0.0698				
					1145	0.200	0.0722				
					1147	0.150	0.0739				
					1149	0.120	0.0753				
					1151	0.080	0.0763				
					1153	0.060	0.0771				
					1155	0.050	0.0776				
					1200	0.020	0.0785				
					1205	0.010	0.0790				
					1210	0.010	0.0793				
					1215	0.0	0.0794				
					1220	0.0	0.0795				
					1300	0.0	0.0798				
					1400	0.0	0.0801				
					1500	0.0	0.0803				

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.308952.

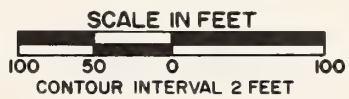


EVENT OF OCTOBER 23, 1970
RIESEL (WACO), TEXAS WATERSHED SW-20



LEGEND

- WATERSHED BOUNDARY
- 536 — CONTOUR
- ▭ GAGING STATION
- RECORDING RAIN GAGE
- ⊕ SOIL MOISTURE STATION



RIESEL, TEXAS
WATERSHED
SW-20

RIESEL (WACO), TEXAS WATERSHED Y-13

LOCATION: Falls County, Texas; 18 miles southeast of Waco; Brazos River Basin.

AREA: 11.30 acres

MONTHLY PRECIPITATION AND RUNOFF (inches)														RIESEL (WACO), TEXAS WATERSHED Y-13															
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual															
1970	P	0.82	4.68	4.62	2.63	1.93	0.36	0.64	3.63	5.87	3.36	3.33	0.83	26.70															
	Q	0.004	0.922	2.615	0.547	0.0	0.0	0.0	0.0	0.0	0.066	0.0	0.0	4.154															
STA AV	P	0.82	3.61	4.40	3.43	1.69	0.35	0.36	1.22	3.81	4.80	1.15	2.35	27.95															
	Q	0.002	0.488	1.821	0.607	0.019	0.0	0.0	0.0	0.0	0.216	0.0	0.250	3.403															
ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																													
Maximum Discharge Date																													
1 Hour Date Vol.																													
2 Hours Date Vol.																													
Maximum Volume for Selected Time Interval																													
6 Hours Date Vol.																													
12 Hours Date Vol.																													
1 Day Date Vol.																													
2 Days Date Vol.																													
8 Days Date Vol.																													
1970		3- 3	0.643	2-24	0.419	2-24	0.574	3- 7	0.972	3- 7	1.025	3- 6	1.701	3- 6	1.725	2-27	2.645												
MAXIMUMS FOR PERIOD OF RECORD																													
		3- 3	0.643	2-24	0.419	2-24	0.574	3- 7	0.972	3- 7	1.025	3- 6	1.701	3- 6	1.725	2-27	2.645												
		1970		1970		1970		1970		1970		1970		1970		1970													

NOTES: Watershed conditions: 96% grain sorghum; 4% grassed waterway. Cropland planted on graded furrows. For map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1969, USDA Misc. Pub. 1370, p. 42.037-5. Precipitation and runoff records began January 1, 1969. Precipitation data obtained from rain gage 70-A. For long-time precipitation records, see National Weather Service records at Waco, Texas.

1970 DAILY PRECIPITATION (inches)						RIESEL (WACO), TEXAS WATERSHED Y-13							
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
1	0.0	1.36	0.29	0.01E	0.0	0.36	0.0	0.0	0.85	0.0	0.05E	0.0	
2	0.0	0.0	0.09E	0.0	0.0	0.0	0.0	0.0	0.28	0.0	0.0	0.0	
3	0.07E	0.0	0.65	0.0	0.0	0.0	0.0	0.03E	0.0	0.0	0.0	0.0	
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
5	0.67	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
6	0.0	0.29	1.13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
7	0.0	0.0	1.37	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.22	0.0	0.0	
9	0.0	0.0	0.0	2.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
10	0.04E	0.0	0.0	0.04	0.0	0.0	0.0	0.0	0.05E	0.0	0.0	0.0	
11	0.0	0.0	0.30	0.0	0.0	0.0	0.0	0.04E	0.0	0.81	0.0	0.0	
12	0.0	0.0	0.0	0.0	0.02E	0.0	0.0	0.0	0.12	0.04	0.0	0.0	
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.17	0.0	0.28	0.0	
14	0.04E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
15	0.0	0.36	0.0	0.0	0.04E	0.0	0.0	0.0	0.0	0.0	0.0	0.14E	
16	0.0	0.0	0.36	0.01E	0.0	0.0	0.0	0.0	1.58	0.0	0.0	0.0	
17	0.0	0.0	0.21	0.0	0.0	0.0	0.0	0.0	0.13	0.0	0.0	0.0	
18	0.0 S	0.0	0.0	0.28	0.0	0.0	0.0	0.0	0.0	0.22	0.0	0.0	
19	0.0	0.0	0.04E	0.13	0.0	0.0	0.0	0.0	0.0	0.06	0.0	0.09E	
20	0.0	0.0	0.27	0.0	0.0	0.0	0.0	0.0	0.03E	0.0	0.0	0.06E	
21	0.0	0.0	0.18	0.0	0.0	0.0	0.12	0.0	0.09E	0.0	0.0	0.03E	
22	0.0	0.0	0.0	0.0	0.19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
23	0.0	0.31	0.0	0.0	0.0	0.0	0.0	0.0 E	0.55	2.01	0.0	0.0	
24	0.0	1.82	0.0	0.0	0.06E	0.0	0.52	0.0	0.0	0.0	0.0	0.0	
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.46	0.0	0.0	0.0	
26	0.0	0.0	0.0	0.0	0.22	0.0	0.0	0.0	3.56	0.0	0.0	0.0	
27	0.0	0.42	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
28	0.0	0.12	0.03E	0.0	0.86	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
29	0.0		0.0	0.0	0.0	0.0	0.0	0.53	0.0	0.0	0.0	0.0	
30	0.0		0.0	0.16	0.54	0.0	0.0	0.03	0.0	0.0	0.0	0.51	
31	0.0		0.0		0.0		0.0	0.0		0.0		0.0	
TOTAL	0.82	4.68	4.62	2.63	1.93	0.36	0.64	0.63	5.87	3.36	0.33	0.83	
STA AV	0.82	3.61	4.40	3.43	1.69	0.35	0.36	1.22	3.81	4.80	1.15	2.35	

NOTES: For daily air temperature in the vicinity, see table for Watershed C, p. 42.092-1. Precipitation values are from rain gage 70-A. Records began January 1, 1969. STA AV based on 2 yr (1969-70) record period. Estimate codes may indicate that non-significant event totals are included.

1970 MEAN DAILY DISCHARGE (cfs) RIESEL (WACO), TEXAS WATERSHED Y-13												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.0	0.012	0.089	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	0.0	0.0	0.032	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3	0.0	0.0	0.277	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4	0.0	0.0	0.003	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	0.002	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6	0.0	0.0	0.302	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7	0.0	0.0	0.510	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8	0.0	0.0	0.008	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9	0.0	0.0	0.001	0.225	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10	0.0	0.0	0.0	0.033	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11	0.0	0.0	0.0	0.001	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.005	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.0	0.009	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.004	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.001	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.031	0.0	0.0
24	0.0	0.366	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.014	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	0.0	0.003	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	0.0	0.043	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MEAN	0.0001	0.0156	0.0400	0.0087	0.0	0.0	0.0	0.0	0.0	0.0010	0.0	0.0
INCHES	0.004	0.022	0.015	0.002	0.0	0.0	0.0	0.0	0.0	0.006	0.0	0.0
STA AV	0.002	0.088	0.021	0.007	0.019	0.0	0.0	0.0	0.0	0.021	0.0	0.025

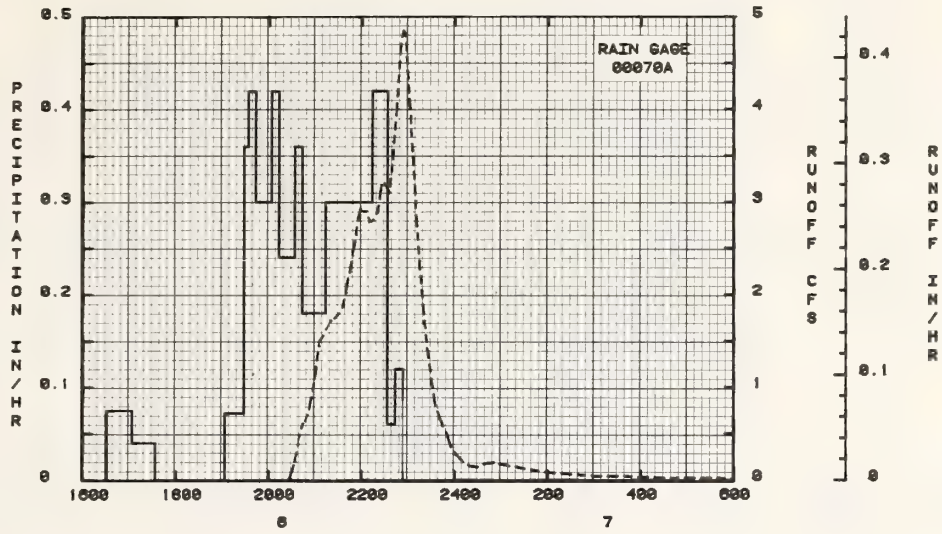
NOTES: To convert mean daily discharge in CFS to IN/DAY, multiply by 2.106341. Records began January 1, 1969.
STA AV based on 2 yr (1969-70) record period.

1970 SELECTED RUNOFF EVENT RIESEL (WACO), TEXAS WATERSHED Y-13												
ANTECEDENT CONDITIONS			RAINFALL				RUNOFF					
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.		
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)		
EVENT OF MARCH 6 - 7, 1970												
RG 00070A			RG 00070A									
3- 6	0.0	0.0	3- 6	1631	0.0	0.0	3- 6	2024	0.0	0.0		
				1703	0.0750	0.04		2025	0.002	0.0		
				1733	0.0400	0.06		2026	0.012	0.0		
				1903	0.0	0.06		2027	0.028	0.0		
				1928	0.0720	0.09		2028	0.050	0.0001		
WATERSHED CONDITIONS:				1933	0.3600	0.12		2029	0.080	0.0002		
96% tilled, seed bed prepared				1943	0.4200	0.19		2030	0.102	0.0003		
for grain sorghum not yet				1953	0.3000	0.24		2032	0.162	0.0007		
planted; 4% Bermudagrass				2003	0.3000	0.29		2034	0.208	0.0012		
waterway, good cover.				2013	0.4200	0.36		2036	0.296	0.0019		
				2023	0.2400	0.40		2038	0.387	0.0029		
				2033	0.2400	0.44		2040	0.488	0.0042		
				2043	0.3600	0.50		2042	0.559	0.0057		
				2113	0.1800	0.59		2044	0.609	0.0074		
				2143	0.3000	0.74		2047	0.636	0.0101		
				2213	0.3000	0.89		2050	0.701	0.0130		
				2233	0.4200	1.03		2055	0.895	0.0188		
				2243	0.0600	1.04		2100	1.148	0.0263		
				2253	0.1200	1.06		2105	1.502	0.0360		
								2110	1.556	0.0472		
								2115	1.648	0.0589		
								2120	1.715	0.0712		
								2125	1.754	0.0839		
								2130	1.803	0.0969		
								2135	1.873	0.1103		
								2140	2.061	0.1247		
								2142	2.170	0.1309		
								2145	2.283	0.1407		
								2148	2.459	0.1511		
								2151	2.580	0.1622		
								2155	2.833	0.1780		
								2158	2.925	0.1906		
								2201	2.899	0.2034		
								2205	2.899	0.2204		
								2210	2.794	0.2412		

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.087764.

1970	SELECTED RUNOFF EVENT					RIESEL (WACO), TEXAS					WATERSHED Y-13	
ANTCEDENT CONDITIONS			RAINFALL			RUNOFF						
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.		
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)		
EVENT OF MARCH 6 - 7, 1970 (CONTINUED)												
							3- 6	2215	2.807	0.2617		
								2220	2.886	0.2825		
								2225	3.184	0.3047		
								2230	3.198	0.3281		
								2235	3.101	0.3511		
								2240	3.486	0.3752		
								2245	4.070	0.4029		
								2250	4.714	0.4350		
								2253	4.846	0.4560		
								2256	4.789	0.4771		
								2259	4.331	0.4971		
								2302	4.002	0.5154		
								2305	3.545	0.5320		
								2308	3.156	0.5467		
								2311	2.743	0.5596		
								2315	2.272	0.5743		
								2320	1.793	0.5892		
								2325	1.389	0.6008		
								2330	1.067	0.6098		
								2335	0.801	0.6166		
								2340	0.684	0.6220		
								2345	0.579	0.6266		
								2350	0.486	0.6305		
								2355	0.364	0.6336		
								2400	0.286	0.6360		
							3- 7	10	0.202	0.6396		
								20	0.148	0.6422		
								30	0.139	0.6443		
								40	0.179	0.6466		
								50	0.191	0.6493		
								100	0.171	0.6519		
								110	0.148	0.6542		
								130	0.118	0.6581		
								200	0.085	0.6626		
								230	0.063	0.6658		
								300	0.044	0.6681		
								330	0.035	0.6698		
								400	0.026	0.6711		
								430	0.022	0.6722		
								500	0.018	0.6731		
								530	0.015	0.6738		
								600	0.012	0.6744		
								700	0.013	0.6755		
								800	0.011	0.6766		

NOTES: To convert runoff in CFS to IN/HR, multiply by .087764.



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RIESEL (WACO), TEXAS WATERSHED Y-14

LOCATION: Falls County, Texas; 18 miles southeast of Waco; Brazos River Basin.

AREA: 5.60 acres

MONTHLY PRECIPITATION AND RUNOFF (inches)							RIESEL (WACO), TEXAS WATERSHED Y-14												
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual					
1970	P	9.74	4.76	4.81	2.58	2.21	0.31	0.41	0.91	5.70	3.37	0.32	0.81	26.93					
	Q	0.001	0.416	2.075	0.026	0.0	0.0	0.0	0.0	0.0	0.038	0.0	0.0	2.556					
STA AV	P	9.88	3.62	4.46	3.46	1.87	0.32	0.23	1.70	3.62	4.87	1.12	2.18	28.33					
	Q	0.001	0.208	1.358	0.247	0.015	0.0	0.0	0.0	0.0	0.127	0.0	0.246	2.203					
ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																			
		Maximum Discharge		1 Hour		2 Hours		Maximum Volume for Selected Time Interval		6 Hours		12 Hours		1 Day		2 Days		8 Days	
		Date	Rate	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.
1970		3- 6	0.335	3- 6	0.267	3- 7	0.452	3- 7	0.902	3- 7	0.970	3- 6	1.615	3- 6	1.627	2-28	2.074		
MAXIMUMS FOR PERIOD OF RECORD																			
		3-23	0.623	3- 6	0.267	3- 7	0.452	3- 7	0.902	3- 7	0.970	3- 6	1.615	3- 6	1.627	2-28	2.074		
		1969		1970		1970		1970		1970		1970		1970		1970		1970	

NOTES: Watershed conditions: 96% fall planted oats; 4% grassed waterway. Cropland planted on graded furrows. For map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1969, USDA Misc. Pub. 1370, p. 42.038-5. Precipitation and runoff records began January 1, 1969. Precipitation data from Thiessen weighted method using rain gages 75A and 89. For long-time precipitation records, see National Weather Service records at Waco, Texas.

1970	DAILY PRECIPITATION (inches)						RIESEL (WACO), TEXAS		WATERSHED Y-14				
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
1	0.0	1.36	0.28	0.00E	0.01E	0.31	0.0	0.0	0.80	0.0	0.05E	0.0	
2	0.0	0.0	0.06E	0.0	0.0	0.0	0.0	0.0	0.33	0.0	0.0	0.0	
3	0.08E	0.0	0.81	0.0	0.0	0.0	0.0	0.02E	0.0	0.0	0.0	0.0	
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0 E	0.0	0.0	0.0	0.0	
5	0.65	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
6	0.0	0.29	1.12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
7	0.0	0.0	1.20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.21	0.0	0.0	
9	0.0	0.0	0.0	0.0	2.07	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
10	0.00E	0.04E	0.0	0.05	0.0	0.0	0.0	0.0	0.01E	0.0	0.0	0.0	
11	0.0	0.0	0.26	0.0	0.0	0.0	0.0	0.06E	0.0	0.51	0.0	0.0	
12	0.0	0.0	0.0	0.0	0.00E	0.0	0.0	0.0	0.0	0.03	0.0	0.0	
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.23	0.0	0.27	0.0	
14	0.00E	0.03E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
15	0.0	0.37	0.0	0.0	0.00E	0.0	0.0	0.0	0.0	0.0	0.0	0.13E	
16	0.0	0.0	0.40	0.03E	0.0	0.0	0.0	0.0	1.58	0.0	0.0	0.0	
17	0.0	0.0	0.16	0.0	0.0	0.0	0.0	0.0	0.11	0.0	0.0	0.0	
18	0.0	0.0	0.0	0.29	0.0	0.0	0.0	0.0	0.0	0.22	0.0	0.0	
19	0.0	0.0	0.03E	0.13	0.0	0.0	0.0	0.0	0.0	0.07	0.0	0.03E	
20	0.0	0.0	0.27	0.0	0.0	0.0	0.0	0.0	0.03E	0.0	0.0	0.11E	
21	0.0	0.0	0.18	0.0	0.0	0.0	0.10	0.0	0.13	0.0	0.0	0.03E	
22	0.0	0.0	0.0	0.0	0.18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
23	0.0	0.26	0.0	0.0	0.00E	0.0	0.0	0.0 E	0.48	1.52	0.0	0.0	
24	0.0	1.82	0.0	0.0	0.09E	0.0	0.32E	0.0	0.0	0.0	0.0	0.0	
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.42	0.0	0.0	0.0	
26	0.0	0.0	0.0	0.0	0.25	0.0	0.0	0.0	0.57	0.0	0.0	0.0	
27	0.0	0.37	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
28	0.0	0.20	0.04E	0.0	0.91	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.82	0.0	0.0	0.0	0.0	
30	0.0	0.0	0.0	0.01E	0.76	0.0	0.0	0.01	0.0	0.0	0.0	0.51	
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
TOTAL	0.74	4.74	4.81	2.58	2.21	0.31	0.41	0.91	5.70	3.37	0.32	0.81	
STA AV	0.88	3.62	4.46	3.46	1.87	0.32	0.23	1.70	3.62	4.87	1.12	2.18	

NOTES: For daily air temperature in the vicinity, see table for Watershed C, p. 42.002-1. Precipitation values are Thiessen weighted average of rain gages 75A and 89. Records began January 1, 1969. STA AV based on 2 yr (1969-70) record period. Estimate codes may indicate that non-significant event totals are included.

1970 MEAN DAILY DISCHARGE (cfs) RIESEL (WACO), TEXAS WATERSHED Y-14												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.0	0.002	0.008	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	0.0	0.0	0.0 T	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3	0.0	0.0	0.097	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	0.0 T	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6	0.0	0.0	0.130	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7	0.0	0.0	0.252	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8	0.0	0.0	0.001	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9	0.0	0.0	0.0	0.005	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10	0.0	0.0	0.0	0.002	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.0	0.0 T	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.009	0.0	0.0
24	0.0	0.095	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.001	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	0.0	0.0 T	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MEAN	0.0	0.0035	0.0158	0.0002	0.0	0.0	0.0	0.0	0.0	0.0003	0.0	0.0
INCHES	0.001	0.416	2.075	0.026	0.0	0.0	0.0	0.0	0.0	0.038	0.0	0.0
STA AV	0.001	0.208	1.358	0.247	0.015	0.0	0.0	0.0	0.0	0.127	0.0	0.246

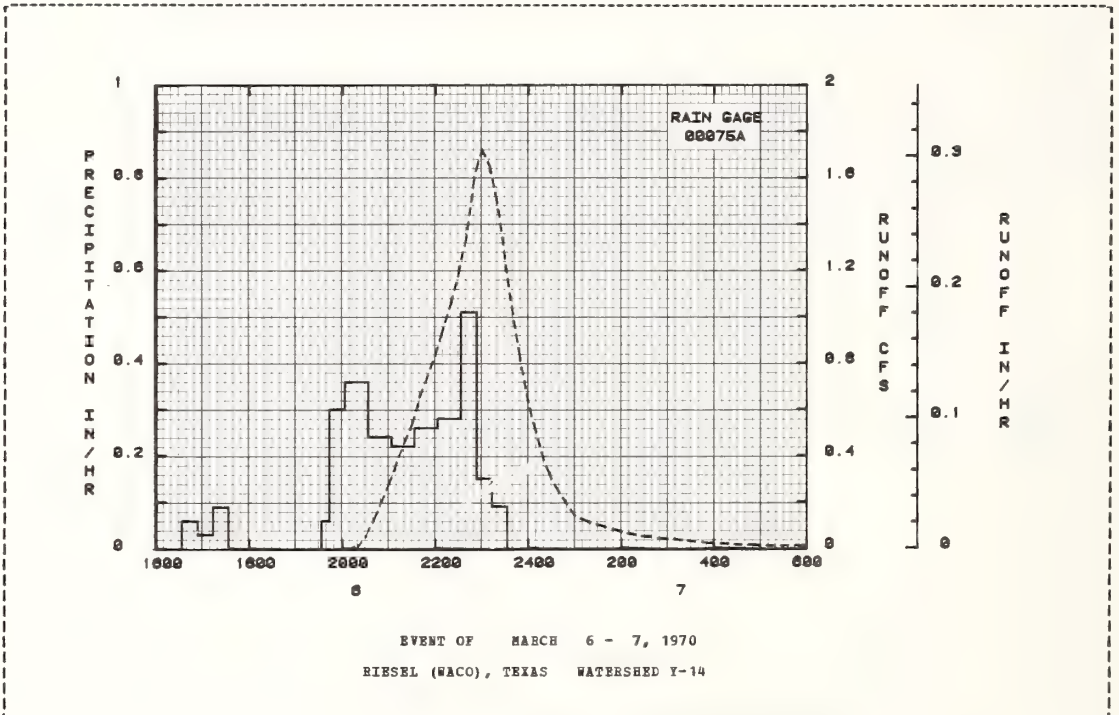
NOTES: To convert mean daily discharge in CFS to IN/DAY, multiply by 4.250295. Records began January 1, 1969.
 STA AV based on 2 yr (1969-70) record period.

1970	SELECTED RUNOFF EVENT					RIESEL (WACO), TEXAS		WATERSHED Y-14			
ANTECEDENT CONDITIONS			RAINFALL			RUNOFF					
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.	
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)	
EVENT OF MARCH 6 - 7, 1970											
BG 00075A			BG 00075A								
3- 6	0.0	0.0	3- 6	1633	0.0	0.0	3- 6	2000	0.0	0.0	
				1653	0.0600	0.02		2005	0.0	0.0	
				1713	0.0300	0.03		2010	0.002	0.0	
				1733	0.0900	0.06		2015	0.006	0.0001	
				1933	0.0	0.06		2020	0.014	0.0002	
WATERSHED CONDITIONS:											
96% fall planted oats, 4 to 6				1943	0.0600	0.07	2025	0.028	0.0005		
inches high; 4% Bermudagrass				1953	0.3000	0.12	2030	0.052	0.0011		
waterway, good cover.				2003	0.3000	0.17	2035	0.088	0.0021		
				2033	0.3600	0.35	2040	0.122	0.0036		
				2043	0.2400	0.39	2045	0.161	0.0057		
				2053	0.2400	0.43	2050	0.196	0.0083		
				2103	0.2400	0.47	2100	0.281	0.0153		
				2133	0.2200	0.58	2110	0.366	0.0248		
				2203	0.2600	0.71	2120	0.457	0.0370		
				2233	0.2800	0.85	2130	0.535	0.0516		
				2253	0.5100	1.02	2140	0.659	0.0692		
				2313	0.1500	1.07	2150	0.751	0.0900		
				2333	0.0900	1.10	2200	0.843	0.1135		
							2210	0.949	0.1399		
							2220	1.062	0.1696		
							2230	1.192	0.2029		
							2240	1.355	0.2405		
							2250	1.597	0.2841		
							2255	1.674	0.3082		
							2300	1.722	0.3333		
							2310	1.654	0.3831		
							2320	1.487	0.4295		
							2330	1.247	0.4699		
							2340	1.005	0.5031		
							2350	0.805	0.5298		
							2400	0.627	0.5509		
							10	0.497	0.5675		
							20	0.378	0.5804		
							30	0.301	0.5904		
							40	0.237	0.5983		

NOTES: To convert runoff in CFS to IN/HR, multiply by .177096.

1970 SELECTED RUNOFF EVENT			RIESEL (WACO), TEXAS WATERSHED Y-14							
ANTECEDENT CONDITIONS			RAINFALL			RUNOFF				
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)
EVENT OF MARCH 6 - 7, 1970 (CONTINUED)										
							3- 7	100	0.145	0.6096
								120	0.114	0.6172
								140	0.087	0.6231
								200	0.069	0.6277
								230	0.047	0.6328
								300	0.035	0.6364
								400	0.022	0.6414
								500	0.014	0.6446
								600	0.008	0.6465
								700	0.005	0.6477
								800	0.003	0.6484

NOTES: To convert runoff in CFS to IN/HR, multiply by .177096.



RIESEL (WACO), TEXAS WATERSHED W-12

LOCATION: Falls County, Texas; 18 miles southeast of Waco; Brazos River Basin.

AREA: 9.90 acres

MONTHLY PRECIPITATION AND RUNOFF (inches)														RIESEL (WACO), TEXAS WATERSHED W-12									
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual									
1970	P	0.82	4.64	4.94	2.57	2.08	0.41	0.25	1.22	5.88	3.26	0.36	0.83	27.26									
	Q	0.008	0.134	1.750	0.069	0.0	0.0	0.0	0.0	0.045	0.159	0.0	0.0	2.164									
STA AV	P	0.82	4.64	4.94	2.57	2.08	0.41	0.25	1.22	5.88	4.84	1.15	2.23	31.02									
	Q	0.008	0.134	1.750	0.069	0.0	0.0	0.0	0.0	0.045	0.191	0.002	0.228	2.427									
ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																							
		Maximum Discharge		1 Hour		2 Hours		Maximum Volume for Selected Time				Interval		2 Days		8 Days							
		Date	Date	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.						
1970		3- 7	0.250	3- 7	0.235	3- 7	0.433	3- 7	0.914	3- 7	0.970	3- 6	1.384	3- 6	1.403	2-27	1.729						
MAXIMUMS FOR PERIOD OF RECORD																							
		3- 7	0.250	3- 7	0.235	3- 7	0.433	3- 7	0.914	3- 7	0.970	3- 6	1.384	3- 6	1.403	2-27	1.729						
1970		1970		1970		1970		1970		1970		1970		1970		1970							

NOTES: Watershed conditions: 97% cotton; 3% grassed waterway, Cropland planted on graded furrows. For map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1969, USDA Misc. Pub. 1370, p. 42-039-3. Precipitation and runoff records began October 1, 1969. Part-year amounts are included in station averages. precipitation data obtained from rain gage W1B. For long-time precipitation records, see National Weather Service records at Waco, Texas.

1970 DAILY PRECIPITATION (inches)													
RIESEL (WACO), TEXAS WATERSHED W-12													
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
1	0.0	1.33	0.32	0.02E	0.04E	0.41	0.0	0.0	0.81	0.0	0.05E	0.0	
2	0.0	0.0	0.06E	0.0	0.0	0.0	0.0	0.0	0.32	0.0	0.0	0.0	
3	0.06E	0.0	0.77	0.0	0.0	0.0	0.0	0.05E	0.0	0.0	0.0	0.0	
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.05E	0.0	0.0	0.0	0.0	
5	0.67	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
6	0.0	0.31	1.20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
7	0.0	0.0	1.25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.20	0.0	0.0	
9	0.0	0.0	0.0	1.98	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
10	0.05E	0.0	0.0	0.05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
11	0.0	0.0	0.24	0.0	0.0	0.0	0.0	0.10E	0.0	0.92	0.0	0.0	
12	0.0	0.0	0.0	0.0	0.02E	0.0	0.0	0.0	0.0	0.03	0.0	0.0	
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.25	0.0	0.31	0.0	
14	0.04E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
15	0.0	0.38	0.0	0.0	0.06E	0.0	0.0	0.0	0.0	0.0	0.0	0.14E	
16	0.0	0.0	0.40	0.03E	0.0	0.0	0.0	0.0	1.65	0.0	0.0	0.0	
17	0.0	0.0	0.17	0.0	0.0	0.0	0.0	0.0	0.13	0.0	0.0	0.0	
18	0.0 S	0.0	0.0	0.29	0.0	0.0	0.0	0.0	0.0	0.18	0.0	0.0	
19	0.0	0.0	0.03E	0.11	0.0	0.0	0.0	0.0	0.0	0.07	0.0	0.06E	
20	0.0	0.0	0.28	0.0	0.0	0.0	0.0	0.0	0.03E	0.0	0.0	0.06E	
21	0.0	0.0	0.17	0.0	0.0	0.0	0.11E	0.0	0.10E	0.0	0.0	0.05E	
22	0.0	0.0	0.0	0.0	0.18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
23	0.0	0.27	0.0	0.0	0.0	0.0	0.0	0.0 E	0.49	1.86	0.0	0.0	
24	0.0	1.82	0.0	0.0	0.10E	0.0	0.14	0.0	0.0	0.0	0.0	0.0	
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.51	0.0	0.0	0.0	
26	0.0	0.0	0.0	0.0	0.26	0.0	0.0	0.0	0.59	0.0	0.0	0.0	
27	0.0	0.37	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
28	0.0	0.16	0.05E	0.0	0.84	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.02	0.0	0.0	0.0	0.0	
30	0.0	0.0	0.0	0.09E	0.58	0.0	0.0	0.0	0.0	0.0	0.0	0.52	
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
TOTAL	0.82	4.64	4.94	2.57	2.08	0.41	0.25	1.22	5.88	3.26	0.36	0.83	
STA AV	0.82	4.64	4.94	2.57	2.08	0.41	0.25	1.22	5.88	4.84	1.15	2.23	

NOTES: For daily air temperature in the vicinity, see table for Watershed C, p. 42-002-1. Precipitation values are from rain gage W1B. Records began October 1, 1969. STA AV based on 2 yr (1969-70) record period. Estimate codes may indicate that non-significant event totals are included.

1970 MEAN DAILY DISCHARGE (cfs) RIESEL (WACO), TEXAS WATERSHED W-12												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.0	0.006	0.013	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	0.0	0.0	0.010	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3	0.0	0.0	0.095	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4	0.0	0.0	0.004	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	0.003	0.0	0.002	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6	0.0	0.0	0.153	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7	0.0	0.0	0.429	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8	0.0	0.0	0.005	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9	0.0	0.0	0.001	0.023	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10	0.0	0.0	0.0 T	0.005	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11	0.0	0.0	0.003	0.0 T	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	0.0	0.0	0.001	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13	0.0	0.0	0.0 T	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.002	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.0	0.003	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	0.0	0.0	0.0 T	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.001	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.005	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.001	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	0.0	0.0	0.001	0.0	0.0	0.0	0.0	0.0	0.0	0.066	0.0	0.0
24	0.0	0.028	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.004	0.0	0.0	0.0	0.0	0.0	0.0	0.011	0.0	0.0	0.0
26	0.0	0.001	0.0	0.0	0.0	0.0	0.0	0.0	0.007	0.0	0.0	0.0
27	0.0	0.005	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	0.0	0.011	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MEAN	0.0001	0.0020	0.0235	0.0010	0.0	0.0	0.0	0.0	0.0006	0.0021	0.0	0.0
INCHES	0.008	0.134	1.750	0.069	0.0	0.0	0.0	0.0	0.045	0.159	0.0	0.0
STA AV	0.008	0.134	1.750	0.069	0.0	0.0	0.0	0.0	0.045	0.191	0.002	0.228

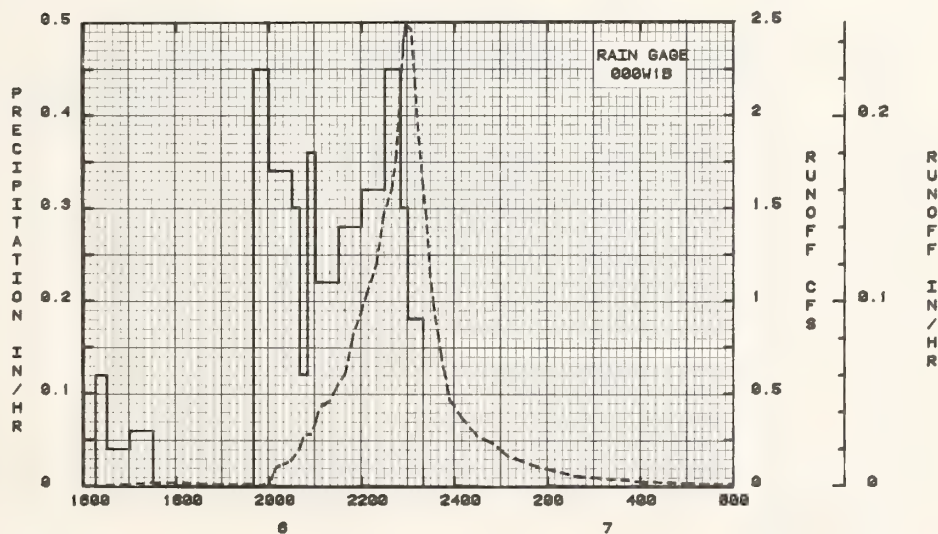
NOTES: To convert mean daily discharge in CFS to IN/DAY, multiply by 2.404207. STA AV based on 2 yr (1969-70) record period.

1970			SELECTED RUNOFF EVENT										RIESEL (WACO), TEXAS										WATERSHED W-12									
ANTECEDENT CONDITIONS			RAINFALL										RUNOFF																			
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.	Date	Time	Rate	Acc.	Date	Time	Rate	Acc.														
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)	Mo-Day	of Day	(cfs)	(inches)	Mo-Day	of Day	(cfs)	(inches)														
EVENT OF MARCH 6 - 7, 1970																																
RG 000W1B			RG 000W1B																													
3- 6	0.0	0.004	3- 6	1615	0.0	0.0	3- 6	1630	0.004	0.0																						
				1630	0.1200	0.03		1700	0.012	0.0004																						
				1700	0.0400	0.05		1730	0.015	0.0011																						
				1730	0.0600	0.08		1800	0.018	0.0019																						
				1940	0.0	0.08		1830	0.008	0.0026																						
WATERSHED CONDITIONS:																																
97% tilled, seed bed prepared			2000			0.4500	0.23	1900			0.007	0.0030																				
for cotton, not yet planted;			2030			0.3400	0.40	1930			0.006	0.0033																				
3% Bermudagrass waterway,			2040			0.3000	0.45	1949			0.004	0.0035																				
good cover.			2050			0.1200	0.47	1954			0.007	0.0035																				
			2100			0.3600	0.53	1959			0.011	0.0036																				
			2130			0.2200	0.64	2001			0.020	0.0037																				
			2200			0.2800	0.78	2003			0.037	0.0038																				
			2230			0.3200	0.94	2005			0.063	0.0040																				
			2250			0.4500	1.09	2007			0.084	0.0042																				
			2300			0.3000	1.14	2009			0.097	0.0045																				
			2310			0.1800	1.17	2012			0.111	0.0050																				
			2320			0.1800	1.20	2014			0.114	0.0054																				
								2019			0.124	0.0064																				
								2024			0.132	0.0075																				
								2025			0.136	0.0086																				
								2034			0.167	0.0099																				
								2039			0.204	0.0114																				
								2044			0.258	0.0133																				
								2049			0.279	0.0155																				
								2054			0.283	0.0178																				
								2059			0.330	0.0204																				
								2104			0.397	0.0234																				
								2109			0.437	0.0269																				
								2112			0.442	0.0291																				
								2114			0.450	0.0306																				
								2119			0.459	0.0344																				
								2129			0.545	0.0428																				
								2139			0.609	0.0524																				
								2149			0.816	0.0643																				
								2159			0.943	0.0790																				

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.100175.

1970 SELECTED RUNOFF EVENT			RIESEL (WACO), TEXAS WATERSHED W-12								
ANTECEDENT CONDITIONS			RAINFALL			RUNOFF					
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.	
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)	
EVENT OF MARCH 6 - 7, 1970 (CONTINUED)											
							3- 6	2209	1.067	0.0958	
								2219	1.201	0.1147	
								2229	1.480	0.1371	
								2239	1.605	0.1629	
								2244	1.775	0.1770	
								2249	2.082	0.1931	
								2251	2.205	0.2002	
								2253	2.336	0.2078	
								2254	2.409	0.2117	
								2255	2.434	0.2157	
								2257	2.497	0.2240	
								2259	2.484	0.2323	
								2304	2.459	0.2530	
								2309	2.182	0.2724	
								2314	1.884	0.2894	
								2319	1.642	0.3041	
								2324	1.445	0.3170	
								2329	1.125	0.3277	
								2334	0.949	0.3364	
								2339	0.816	0.3438	
								2344	0.683	0.3501	
								2349	0.579	0.3554	
								2354	0.463	0.3597	
								2400	0.425	0.3642	
							3- 7	9	0.366	0.3701	
								29	0.270	0.3807	
								49	0.228	0.3890	
								109	0.164	0.3955	
								129	0.132	0.4004	
								149	0.098	0.4042	
								209	0.081	0.4072	
								239	0.051	0.4105	
								309	0.036	0.4127	
								409	0.019	0.4155	
								509	0.013	0.4171	
								609	0.009	0.4182	
								709	0.008	0.4191	

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.100175.



EVENT OF MARCH 6 - 7, 1970
RIESEL (WACO), TEXAS WATERSHED W-12

RIESEL (WACO), TEXAS WATERSHED W-13

LOCATION: Falls County, Texas; 18 miles southeast of Waco; Brazos River Basin.

AREA: 11.30 acres

MONTHLY PRECIPITATION AND RUNOFF (inches)														RIESEL (WACO), TEXAS WATERSHED W-13									
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual									
1970	P	0.82	4.64	4.94	2.57	2.08	0.41	0.25	1.22	5.88	3.26	0.36	0.83	27.26									
	Q	0.012	0.114	1.375	0.157	0.0	0.0	0.0	0.0	0.073	0.065	0.0	0.0	1.797									
STA AV	P	0.82	4.64	4.94	2.57	2.08	0.41	0.25	1.22	5.88	4.84	1.15	2.25	31.02									
	Q	0.012	0.114	1.375	0.157	0.0	0.0	0.0	0.0	0.073	0.114	0.002	0.076	1.925									
ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																							
		Maximum Discharge		1 Hour		2 Hours		Maximum Volume for Selected Time Interval		1 Day		2 Days		8 Days									
		Date	Rate	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.						
1970		3- 7	0.194	3- 7	0.178	3- 7	0.337	3- 7	0.777	3- 7	0.862	3- 6	1.150	3- 6	1.186	3- 1	1.340						
MAXIMUMS FOR PERIOD OF RECORD																							
		3- 7	0.194	3- 7	0.178	3- 7	0.337	3- 7	0.777	3- 7	0.862	3- 6	1.150	3- 6	1.186	3- 1	1.340						
		1970		1970		1970		1970		1970		1970		1970		1970							

NOTES: Watershed conditions: 97% cotton; 3% grassed waterway. Cropland planted on graded furrows. For map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1969, USDA Misc. Pub. 1370, p. 42.040-3. Precipitation and runoff records began October 1, 1969. Part-year amounts are included in station averages. Precipitation data obtained from rain gage W1B. For long-time precipitation records, see National Weather Service records at Waco, Texas.

1970 DAILY PRECIPITATION (inches)													RIESEL (WACO), TEXAS WATERSHED W-13				
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec					
1	0.0	1.33	0.32	0.02E	0.04E	0.41	0.0	0.0	0.81	0.0	0.05E	0.0					
2	0.0	0.0	0.06E	0.0	0.0	0.0	0.0	0.0	0.32	0.0	0.0	0.0					
3	0.06E	0.0	0.77	0.0	0.0	0.0	0.0	0.05E	0.0	0.0	0.0	0.0					
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.05E	0.0	0.0	0.0	0.0					
5	0.67	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0					
6	0.0	0.31	1.20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0					
7	0.0	0.0	1.25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0					
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.20	0.0	0.0					
9	0.0	0.0	0.0	1.98	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0					
10	0.05E	0.0	0.0	0.05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0					
11	0.0	0.0	0.24	0.0	0.0	0.0	0.0	0.10E	0.0	0.52	0.0	0.0					
12	0.0	0.0	0.0	0.0	0.02E	0.0	0.0	0.0	0.0	0.03	0.0	0.0					
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.25	0.0	0.31	0.0					
14	0.04E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0					
15	0.0	0.38	0.0	0.0	0.06E	0.0	0.0	0.0	0.0	0.0	0.0	0.14E					
16	0.0	0.0	0.40	0.03E	0.0	0.0	0.0	0.0	1.65	0.0	0.0	0.0					
17	0.0	0.0	0.17	0.0	0.0	0.0	0.0	0.0	0.13	0.0	0.0	0.0					
18	0.0 S	0.0	0.0	0.29	0.0	0.0	0.0	0.0	0.0	0.18	0.0	0.0					
19	0.0	0.0	0.03E	0.11	0.0	0.0	0.0	0.0	0.0	0.07	0.0	0.06E					
20	0.0	0.0	0.28	0.0	0.0	0.0	0.0	0.0	0.03E	0.0	0.0	0.06E					
21	0.0	0.0	0.17	0.0	0.0	0.0	0.11E	0.0	0.10E	0.0	0.0	0.05E					
22	0.0	0.0	0.0	0.0	0.18	0.0	0.0	0.0	0.0	0.0	0.0	0.0					
23	0.0	0.27	0.0	0.0	0.0	0.0	0.0	0.0 E	0.49	1.86	0.0	0.0					
24	0.0	1.82	0.0	0.0	0.10E	0.0	0.14	0.0	0.0	0.0	0.0	0.0					
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.51	0.0	0.0	0.0					
26	0.0	0.0	0.0	0.0	0.26	0.0	0.0	0.0	0.59	0.0	0.0	0.0					
27	0.0	0.37	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0					
28	0.0	0.16	0.05E	0.0	0.84	0.0	0.0	0.0	0.0	0.0	0.0	0.0					
29	0.0		0.0	0.0	0.0	0.0	0.0	1.02	0.0	0.0	0.0	0.0					
30	0.0		0.0	0.09E	0.58	0.0	0.0	0.0	0.0	0.0	0.0	0.52					
31	0.0		0.0		0.0		0.0	0.0	0.0	0.0	0.0	0.0					
TOTAL	0.82	4.64	4.94	2.57	2.08	0.41	0.25	1.22	5.88	3.26	0.36	0.83					
STA AV	0.82	4.64	4.94	2.57	2.08	0.41	0.25	1.22	5.88	4.84	1.15	2.23					

NOTES: For daily air temperature in the vicinity, see table for Watershed C, p. 42.002-1. Precipitation values are from rain gage W1B. Records began October 1, 1969. STA AV based on 2 yr (1969-70) record period. Estimate codes may indicate that non-significant event totals are included.

1970 MEAN DAILY DISCHARGE (cfs) RIESEL (WACO), TEXAS WATERSHED W-13												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.0	0.013	0.009	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	0.0	0.0	0.004	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3	0.0	0.0	0.054	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4	0.0	0.0	0.006	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	0.006	0.0	0.0 T	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6	0.0	0.0	0.102	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7	0.0	0.0	0.452	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8	0.0	0.0	0.010	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9	0.0	0.0	0.001	0.051	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10	0.0	0.0	0.0	0.022	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11	0.0	0.0	0.001	0.002	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	0.0	0.0	0.0 T	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0 T	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.0	0.004	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.0 T	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.009	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.001	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.031	0.0	0.0
24	0.0	0.033	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0 T	0.0	0.0
25	0.0	0.002	0.0	0.0	0.0	0.0	0.0	0.0	0.024	0.0	0.0	0.0
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.010	0.0	0.0	0.0
27	0.0	0.001	0.0	0.0	0.0	0.0	0.0	0.0	0.0 T	0.0	0.0	0.0
28	0.0	0.004	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MEAN	0.0002	0.0019	0.0211	0.0025	0.0	0.0	0.0	0.0	0.0012	0.0010	0.0	0.0
INCHES	0.012	0.114	1.375	0.157	0.0	0.0	0.0	0.0	0.073	0.065	0.0	0.0
STA AV	0.012	0.114	1.375	0.157	0.0	0.0	0.0	0.0	0.073	0.114	0.002	0.076

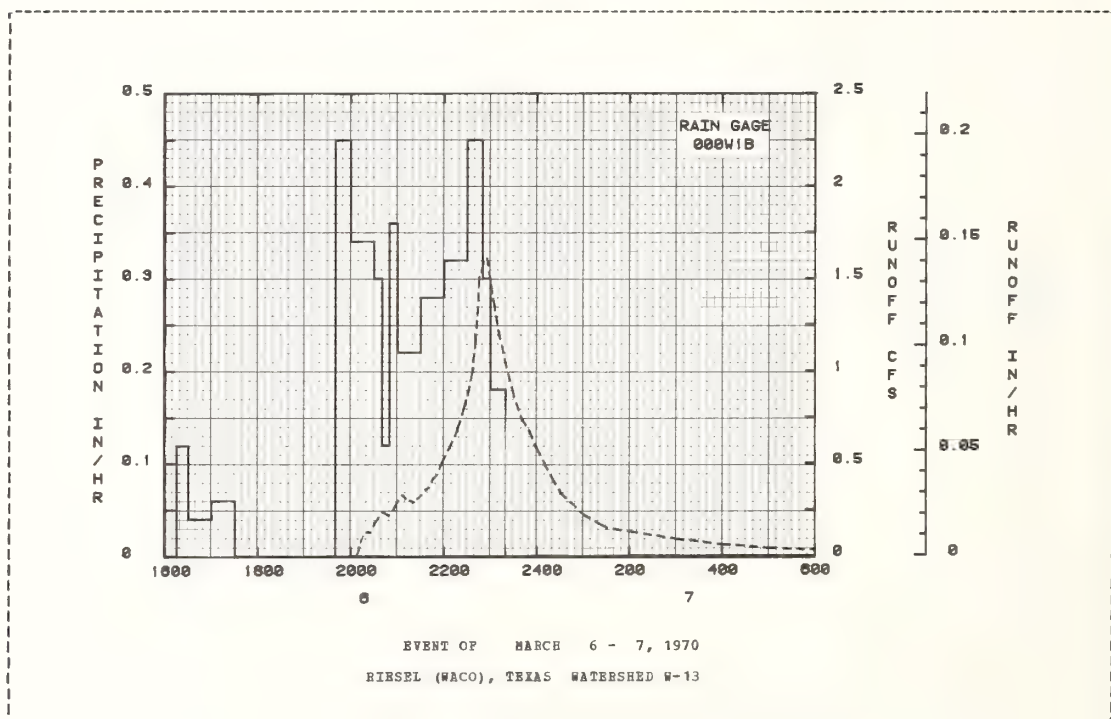
NOTES: To convert mean daily discharge in CFS to IN/DAY, multiply by 2.106341. Records began October 1, 1969. STA AV based on 2 yr (1969-70) record period.

1970 SELECTED RUNOFF EVENT RIESEL (WACO), TEXAS WATERSHED W-13												
ANTECEDENT CONDITIONS			RAINFALL				RUNOFF					
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.		
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)		
EVENT OF MARCH 6 - 7, 1970												
RG 000W1B			RG 000W1B									
3- 6	0.0	0.0	3- 6	1615	0.0	0.0	3- 6	2006	0.0	0.0		
				1630	0.1200	0.03		2007	0.001	0.0		
				1700	0.0400	0.05		2008	0.005	0.0		
				1730	0.0600	0.08		2009	0.016	0.0		
				1940	0.0	0.08		2010	0.029	0.0		
WATERSHED CONDITIONS:				2000	0.4500	0.23		2011	0.050	0.0001		
97% tilled, seed bed prepared				2030	0.3400	0.40		2013	0.081	0.0003		
for cotton, not yet planted;				2040	0.3000	0.45		2016	0.106	0.0007		
3% Bermudagrass waterway, good				2050	0.1200	0.47		2021	0.127	0.0016		
cover.				2100	0.3600	0.53		2026	0.135	0.0026		
				2130	0.2200	0.64		2031	0.176	0.0037		
				2200	0.2800	0.78		2036	0.215	0.0051		
				2230	0.3200	0.94		2041	0.241	0.0068		
				2250	0.4500	1.09		2049	0.221	0.0095		
				2300	0.3000	1.14		2056	0.262	0.0120		
				2310	0.1800	1.17		2101	0.298	0.0141		
				2320	0.1800	1.20		2106	0.333	0.0164		
								2111	0.308	0.0187		
								2116	0.298	0.0209		
								2121	0.291	0.0231		
								2126	0.308	0.0253		
								2131	0.333	0.0276		
								2136	0.358	0.0301		
								2141	0.370	0.0328		
								2146	0.418	0.0357		
								2151	0.443	0.0388		
								2156	0.487	0.0422		
								2201	0.543	0.0460		
								2206	0.577	0.0501		
								2211	0.618	0.0545		
								2216	0.672	0.0592		
								2221	0.728	0.0643		
								2226	0.800	0.0699		
								2231	0.875	0.0760		
								2236	0.975	0.0828		

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.087764.

1970	SELECTED RUNOFF EVENT			RIESEL (WACO), TEXAS WATERSHED W-13						
ANTECEDENT CCNDITIONS			RAINFALL				RUNOFF			
Date Mo-Day	Rainfall (inches)	Runoff (inches)	Date Mo-Day	Time of Day	Intensity (in/hr)	Acc. (inches)	Date Mo-Day	Time of Day	Rate (cfs)	Acc. (inches)
EVENT OF MARCH 6 - 7, 1970 (CONTINUED)										
							3- 6	2241	1.156	0.0906
								2246	1.513	0.1004
								2249	1.540	0.1071
								2251	1.586	0.1117
								2256	1.614	0.1234
								2301	1.460	0.1347
								2306	1.332	0.1449
								2311	1.210	0.1542
								2321	1.024	0.1705
								2331	0.862	0.1843
								2341	0.740	0.1960
								2351	0.672	0.2063
								2400	0.582	0.2146
							3- 7	10	0.501	0.2225
								20	0.418	0.2292
								31	0.340	0.2353
								101	0.221	0.2476
								131	0.146	0.2557
								201	0.131	0.2618
								301	0.089	0.2715
								401	0.060	0.2780
								501	0.041	0.2824
								601	0.033	0.2856
								842	0.025	0.2924

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.087764.



OXFORD, MISSISSIPPI WATERSHED W-4C

LOCATION: Marshall Co., Miss.; 4.8 mi. SE of Holly Springs, on State Highway No. 4; Chews Creek, Pigeon Boost Creek Watershed, Yazoo River Basin.

AREA: 1580.00 acres 2.47 sq. miles

MONTHLY PRECIPITATION AND RUNOFF (inches)														OXFORD, MISSISSIPPI WATERSHED W-4C									
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual									
1970	P	1.11	3.97	6.18	7.48	4.68	4.56	2.08	4.52	2.82	5.97	2.54	3.33	49.24									
	Q	0.064	0.320	1.376	1.489	0.427	0.458	0.002	0.084	0.005	0.212	0.043	0.148	4.629									
STA AV	P	3.64	4.68	4.82	5.04	4.04	3.11	3.77	3.78	4.74	2.66	4.28	5.22	49.77									
	Q	0.606	0.928	0.894	0.751	0.291	0.118	0.201	0.230	0.343	0.121	0.479	0.726	5.688									
ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																							
		Maximum Discharge				Maximum Volume for Selected Time Interval																	
		Date	Rate	1 Hour Date	Vol.	2 Hours Date	Vol.	6 Hours Date	Vol.	12 Hours Date	Vol.	1 Day Date	Vol.	2 Days Date	Vol.	8 Days Date	Vol.						
1970		6-15	0.162	6-15	0.132	3- 3	0.229	3- 3	0.576	3- 3	0.697	3- 3	0.728	3- 2	0.752	4-16	1.007						
MAXIMUMS FOR PERIOD OF RECORD																							
		2-23	0.840	2-23	0.720	2-23	1.130	3- 4	1.560	3- 4	1.620	1-31	2.380	1-30	3.340	1-27	3.900						
		1962		1962		1962		1964		1964		1957		1957		1957							

NOTES: Watershed conditions: About 13% in cultivation (cotton), fair cover November to March, poor cover April and May improving to good by mid-July; 40% in pasture and idle land, good cover April to October with fair cover remainder of year; 46% in woods, good cover; 1% bare gullies. Percentages of total area in various land use categories are based on the latest survey completed in 1970. Reported as Watershed W-4 prior to 1965 and from 1965-68 as Watershed W-4A; redesignated as W-4C (1969). Gaging station relocated upstream, Jan. 1965, reducing drainage area from 2,000 to 1,580 acres. About 30% of drainage area above small desilting and retention dams. For map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1956-59, USDA Misc. Pub. 945, p. 62.1-4. Monthly precipitation Thiessen weighted from rain gages 7, 8 and 18. Precipitation and runoff records began Jan. 1957. For long-time precipitation records, see National Weather Service records at Holly Springs, 4W, Mississippi.

1970 DAILY AIR TEMPERATURES (degrees F)													OXFORD, MISSISSIPPI WATERSHED W-4C	
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
	max min	max min	max min	max min	max min	max min	max min	max min	max min	max min	max min	max min		
1	32 24	56 28	59 47	70 37	85 69	73 69	88 63	95 72	92 66	81 45	72 37	73 51		
2	43 24	49 40	67 47	79 40	72 50	80 66	93 63	96 71	92 66	84 46	73 43	67 49		
3	46 18	46 12	66 55	52 31	64 43	76 62	97 66	95 72	92 67	86 51	54 41	75 50		
4	36 16	31 10	58 54	67 32	65 39	76 53	98 69	93 74	89 66	70 44	55 34	75 44		
5	50 28	45 13	64 43	68 40	75 39	76 54	84 57	95 70	87 73	75 41	48 36	61 28		
6	49 27	48 36	55 31	59 35	83 49	73 57	78 52	94 70	92 70	83 42	61 31	56 30		
7	27 1	51 40	60 31	72 38	80 54	73 55	82 52	91 70	95 70	77 63	68 31	43 22		
8	20 5	61 40	58 31	71 45	83 57	81 55	88 58	89 72	94 69	67 64	73 43	53 21		
9	14 6	53 28	68 35	79 52	83 61	84 55	82 68	86 73	94 70	78 50	72 48	59 33		
10	26 15	38 26	71 37	72 47	79 65	85 59	89 61	80 73	94 70	62 35	65 45	59 52		
11	33 7	50 25	62 45	77 40	75 64	85 63	88 61	85 65	81 56	65 36	53 33	72 54		
12	37 32	55 28	63 39	73 41	81 65	85 64	90 65	80 68	80 55	72 52	60 35	68 33		
13	35 23	47 35	40 32	74 46	83 66	88 70	90 67	85 65	90 59	78 64	60 35	40 25		
14	50 23	57 26	46 28	75 42	83 62	86 67	93 67	86 64	91 69	74 59	60 39	48 20		
15	55 28	64 35	48 26	63 43	83 64	90 67	90 71	88 64	90 64	68 56	49 36	54 20		
16	58 28	35 28	48 26	75 65	84 57	85 67	88 69	92 68	92 68	65 44	38 20	52 38		
17	57 38	42 26	51 30	69 40	64 46	90 72	87 64	91 70	89 65	81 33	48 20	53 40		
18	55 29	57 26	51 36	74 62	75 49	90 74	84 62	94 70	91 65	66 37	55 28	52 35		
19	30 20	68 32	44 37	80 62	82 49	93 68	90 65	91 71	91 70	65 49	56 39	63 35		
20	24 19	41 21	56 38	69 49	84 50	91 68	91 69	92 71	90 70	64 54	65 43	65 39		
21	27 10	42 20	50 38	82 45	85 58	92 68	80 62	91 69	93 71	58 44	57 27	61 39		
22	31 9	61 22	40 36	76 48	86 59	85 66	69 60	88 70	93 68	66 40	60 30	67 59		
23	35 19	60 43	54 37	83 65	88 59	82 60	70 60	89 71	93 68	74 40	57 30	68 59		
24	45 29	52 43	56 36	82 60	89 64	85 61	84 65	84 59	88 71	57 50	33 11	72 25		
25	61 31	56 44	71 46	76 50	90 64	85 62	87 65	81 56	82 69	71 45	33 11	44 24		
26	71 33	47 17	70 43	66 60	89 63	87 65	88 68	82 56	84 69	75 46	50 22	44 16		
27	64 32	45 17	50 29	80 62	80 52	91 65	90 70	86 60	79 51	79 53	62 16	39 15		
28	71 35	66 35	58 27	82 69	83 53	77 55	90 68	89 63	67 43	74 61	73 57	47 26		
29	72 56		66 40	82 71	86 66	81 59	92 68	89 64	73 43	63 44	75 49	48 37		
30	56 26		49 37	85 69	82 66	87 59	93 70	90 70	79 44	63 33	74 50	52 28		
31	46 25		56 35		82 68		93 72	91 68		71 32		44 33		
AV.	44 23	51 28	56 37	74 50	81 57	84 63	87 64	89 68	88 64	71 47	59 34	57 35		
MEAN	33.5	39.7	46.8	61.7	69.0	73.3	75.9	78.4	76.0	58.8	46.4	46.1		
STA AV	47.28	52 31	60 37	72 50	80 58	86 64	89 68	89 67	82 60	73 48	62 38	51 30		

NOTES: Temperature data from U.S. Weather Bureau Station at Holly Springs 4W Mississippi. STA AV is for 14 yr (1957-70) record period.

1970	DAILY PRECIPITATION (inches)					OXFORD, MISSISSIPPI WATERSHED W-4C							
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
1	0.0	1.27	0.19	1.50	0.14	0.90	0.0	0.82	0.0	0.0	0.0	0.0	
2	0.0	0.0	0.29	0.0	0.07	0.62	0.0	0.0	0.0	0.0	0.0	0.0	
3	0.0	0.0	2.24	0.0	0.0	0.0	0.0	0.07	0.45	0.0	0.0	0.0	
4	0.0	0.0	0.0	0.0	0.0	0.10	0.0	0.01	0.22	0.0	0.0	0.0	
5	0.0	0.09	0.0	0.0	0.0	0.03	0.0	3.14	0.0	0.0	0.0	0.00	
6	0.02	0.08	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.94	0.0	0.0	
8	0.0	0.29	0.0	0.0	0.0	0.0	1.14	0.0	0.0	0.0	0.0	0.0	
9	0.0	0.0	0.0	0.0	0.05	0.0	0.0	0.21	0.0	0.81	1.14	0.0	
10	0.0	0.0	0.0	0.0	2.52	0.0	0.0	0.0	0.98	0.0	0.0	0.0	
11	0.69	0.0	0.16	0.0	0.18	0.0	0.0	0.0	0.0	0.14	0.0	0.31	
12	0.0	0.0	0.31	0.64	0.0	0.0	0.0	0.0	0.0	0.72	0.10	0.0	
13	0.0	0.0	0.0	0.09	0.0	0.31	0.0	0.0	0.0	2.07	0.32	0.0	
14	0.0	0.37	0.0	0.0	0.0	0.0	0.0	0.13	0.0	0.0	0.48	0.0	
15	0.0	1.29	0.0	0.0	0.0	2.52	0.0	0.0	0.0	0.0	0.0	0.65	
16	0.0	0.0	0.0	0.06	0.75	0.0	0.0	0.98	0.0	0.0	0.0	0.29	
17	0.0	0.0	0.80	2.30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.26	0.0	
19	0.02	0.0	1.21	1.28	0.0	0.0	0.0	0.00	0.0	0.22	0.25	0.14	
20	0.0	0.0	0.05	0.0	0.0	0.0	0.45	0.93	0.0	0.02	0.0	1.22	
21	0.0	0.0	0.47	0.0	0.0	0.0	0.0	0.05	0.0	0.0	0.0	0.00	
22	0.0	0.03	0.0	0.0	0.0	0.0	0.44	0.86	0.0	0.0	0.0	0.07	
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.32	0.77	0.0	0.0	0.04	
24	0.0	0.09	0.02	0.56	0.07	0.07	0.0	0.0	0.0	0.69	0.0	0.0	
25	0.0	0.39	0.38	0.54	0.02	0.0	0.06	0.0	0.0	0.0	0.0	0.0	
26	0.0	0.0	0.0	0.52	0.0	0.0	0.0	0.0	0.40	0.0	0.0	0.0	
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
28	0.0	0.05	0.07	0.0	0.0	0.0	0.0	0.0	0.0	0.36	0.0	0.0	
29	0.38	0.0	0.0	0.0	0.44	0.0	0.0	0.0	0.0	0.0	0.0	0.03	
30	0.0	0.0	0.0	0.0	0.39	0.0	0.0	0.00	0.0	0.0	0.0	0.31	
31	0.0	0.0	0.0	0.0	0.35	0.0	0.0	0.0	0.0	0.0	0.0	0.07	
TOTAL	1.11	3.97	6.18	7.48	4.68	4.56	2.08	4.52	2.82	5.97	2.54	3.33	
STA AV	3.64	4.68	4.82	5.04	4.04	3.11	3.77	3.78	4.74	2.66	4.28	5.22	

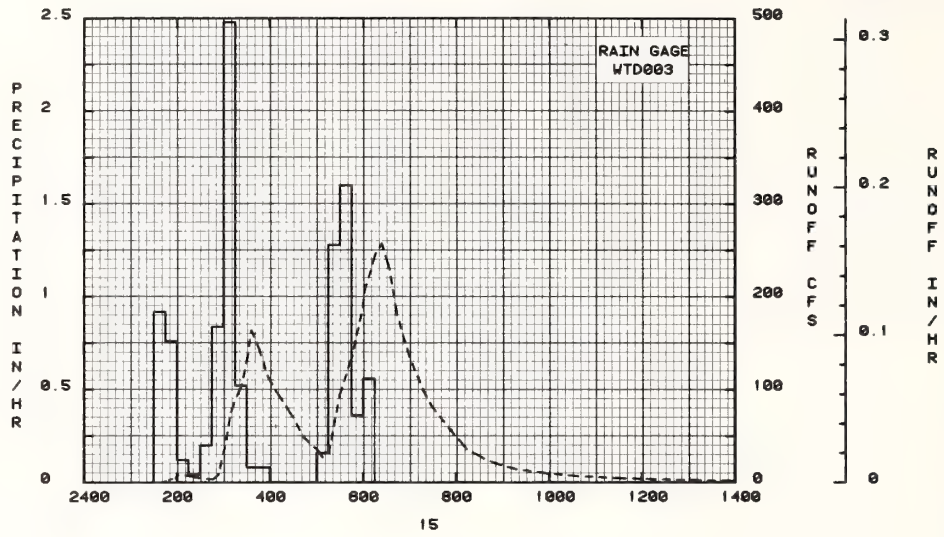
NOTES: Daily precipitation values Thiessen weighted from rain gages 7, 8 and 18. STA AV based on 14 yr (1957-70) record period.

1970	MEAN DAILY DISCHARGE (cfs)					OXFORD, MISSISSIPPI WATERSHED W-4C							
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
1	0.906	5.155	0.471	10.185	0.471	0.380	0.0	0.0	0.0	0.0	0.0	0.0	
2	0.906	1.171	0.861	2.796	0.471	2.950	0.0	0.0	0.0	0.0	0.0	0.0	
3	1.054	0.031	47.670	0.471	0.471	0.266	0.0	0.0	0.0	0.0	0.0	0.0	
4	0.677	0.0	2.231	0.471	0.380	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
5	0.338	0.371	0.677	0.471	0.250	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
6	0.0	0.290	0.574	0.471	0.290	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
7	0.0	0.290	0.471	0.380	0.290	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
8	0.0	0.290	0.380	0.380	0.290	0.0	0.156	0.0	0.0	0.0	0.0	0.0	
9	0.0	0.290	0.290	0.471	0.145	0.0	0.0	0.0	0.0	0.414	2.250	0.0	
10	0.0	0.115	0.290	0.471	19.223	0.0	0.0	0.0	0.262	0.0	0.0	0.0	
11	0.0	0.086	0.290	0.471	4.051	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
12	0.0	0.0	0.290	0.494	0.471	0.0	0.0	0.0	0.0	0.299	0.0	0.0	
13	0.0	0.0	0.290	1.783	0.471	0.0	0.0	0.0	0.0	13.246	0.0	0.0	
14	0.0	0.380	0.290	0.290	0.235	0.0	0.0	0.0	0.0	0.0	0.555	0.0	
15	0.0	8.380	0.290	0.290	0.0	26.774	0.0	0.0	0.0	0.0	0.0	0.100	
16	0.0	1.978	0.380	0.598	0.760	0.032	0.0	0.079	0.0	0.0	0.0	0.856	
17	0.0	0.301	3.007	37.399	0.047	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
18	0.0	0.132	1.205	1.607	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
19	0.0	0.132	18.296	21.901	0.0	0.0	0.0	0.0	0.0	0.0	0.069	0.0	
20	0.0	0.132	2.032	2.343	0.0	0.0	0.0	1.754	0.0	0.0	0.016	5.192	
21	0.0	0.132	2.852	0.677	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.658	
22	0.0	0.132	1.205	0.677	0.0	0.0	0.0	2.994	0.0	0.0	0.0	0.0	
23	0.0	0.132	0.574	0.677	0.0	0.0	0.0	0.723	0.017	0.0	0.0	0.0	
24	0.0	0.132	0.688	1.977	0.0	0.0	0.0	0.0	0.0	0.127	0.0	0.0	
25	0.0	0.132	1.582	1.597	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
26	0.0	0.222	0.985	6.553	0.0	0.0	0.0	0.0	0.039	0.0	0.0	0.0	
27	0.0	0.380	0.677	0.791	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
28	0.0	0.471	0.677	0.791	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
29	0.366	0.0	0.677	0.791	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
30	0.0	0.0	0.677	0.574	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
31	0.0	0.0	0.483	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
MEAN	0.1370	0.7592	2.9472	3.2951	0.9148	1.0134	0.0050	0.1790	0.0106	0.4544	0.0957	0.3163	
INCHES	0.064	0.320	1.376	1.489	0.427	0.458	0.002	0.084	0.005	0.212	0.043	0.148	
STA AV	0.606	0.928	0.894	0.751	0.291	0.118	0.201	0.230	0.343	0.121	0.479	0.726	

NOTES: To convert discharge in CFS to IN/DAY, multiply by 0.01506. STA AV based on 14 yr (1957-70) record period. Quality of records: Good, estimated to be within 10% of actual.

1970			SELECTED RUNOFF EVENT				OXFORD, MISSISSIPPI				WATERSHED N-AC			
ANTECEDENT CONDITIONS			RAINFALL				RUNOFF							
Date Mo-Day	Rainfall (inches)	Runoff (inches)	Date Mo-Day	Time of Day	Intensity (in/hr)	Acc. (inches)	Date Mo-Day	Time of Day	Rate (cfs)	Acc. (inches)				
EVENT OF JUNE 15 - 16, 1970														
RG WTD003			RG WTD003											
6-15	0.01	0.0	6-15	130	0.0	0.0	6-15	140	0.132	0.0				
				145	0.9200	0.23		146	1.435	0.0				
				200	0.7600	0.42		150	3.158	0.0001				
				215	0.1200	0.45		154	4.009	0.0002				
				230	0.0400	0.46		158	4.951	0.0004				
WATERSHED CONDITIONS: About 13% of area in cultivation, primarily cotton, poor to fair cover; 40% in pasture and idle land with fair to good cover; 46% in woods, good cover; 1% bare gullies.				245	0.2000	0.51		202	8.290	0.0007				
				300	0.8800	0.72		214	7.100	0.0017				
				315	2.4800	1.34		230	4.469	0.0027				
				330	0.5200	1.47		246	3.158	0.0033				
				345	0.0800	1.49		254	8.911	0.0038				
				400	0.0800	1.51		302	39.228	0.0058				
				415	0.0	1.51		310	77.000	0.0107				
				500	0.0	1.51		314	85.938	0.0141				
				515	0.1600	1.55		324	106.208	0.0242				
				530	1.2800	1.87		332	139.320	0.0345				
				545	1.6005	2.27		336	163.795	0.0408				
				600	0.3600	2.36		346	143.680	0.0569				
				615	0.5600	2.50		358	112.014	0.0729				
								416	87.728	0.0917				
								430	69.800	0.1032				
								844	48.128	0.1118				
								502	33.792	0.1195				
								508	26.936	0.1214				
								516	32.000	0.1239				
								530	95.000	0.1332				
								546	137.155	0.1526				
								600	189.480	0.1765				
								602	206.455	0.1806				
								616	247.095	0.2138				
								624	257.655	0.2349				
								634	229.000	0.2604				
								644	180.000	0.2818				
								700	135.000	0.3082				
								718	98.704	0.3302				
								728	82.368	0.3357				
								752	57.195	0.3572				
								814	35.606	0.3679				
								836	25.412	0.3749				
								858	18.369	0.3799				
								918	14.000	0.3833				
								958	9.553	0.3882				
								1038	6.531	0.3916				
								1130	4.469	0.3946				
								1218	3.158	0.3965				
								1316	2.056	0.3981				
								1516	1.159	0.4001				
								1944	0.471	0.4024				
								2400	0.132	0.4032				
								532	0.132	0.4037				
								600	0.0	0.4037				

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.000628. Thiessen weighted storm rainfall, rain gages 7, 8 and 18. For 30-day antecedent P and Q, see tables on p. 62.001-2.



EVENT OF JUNE 15 - 16, 1970
OXFORD, MISSISSIPPI WATERSHED W-4C

OXFORD, MISSISSIPPI WATERSHED W-5

LOCATION: Marshall Co., Miss.; 6.1 mi. SW of Holly Springs, on State Highway No. 4; Willie Wilkins Creek, Pigeon Roost Creek Watershed, Yazoo River Basin.

AREA: 1000.00 acres 1.56 sq. miles

MONTHLY PRECIPITATION AND RUNOFF (inches)										OXFORD, MISSISSIPPI				WATERSHED W-5					
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual					
1970	P	1.09	3.85	6.34	7.11	5.11	4.95	2.35	2.87	2.63	5.77	2.72	3.33	48.10					
	Q	0.135	1.158	3.657	2.919	1.317	1.551	0.006	0.001	0.0	0.171	0.027	0.401	11.344					
STA AV	P	3.70	4.66	4.98	5.09	4.21	3.17	3.74	3.99	4.64	2.58	4.35	5.30	50.40					
	Q	1.315	1.794	1.930	1.536	0.745	0.356	0.307	0.420	0.539	0.226	0.832	1.705	11.704					
ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																			
		Maximum Discharge		1 Hour		2 Hours		Maximum Volume for Selected Time Interval		6 Hours		12 Hours		1 Day		2 Days		8 Days	
		Date	Rate	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.
1970		6-15	0.543	6-15	0.432	6-15	0.602	3- 3	1.308	3- 3	1.568	3- 3	1.675	3- 3	1.761	4-12	1.920		
MAXIMUMS FOR PERIOD OF RECORD																			
		3- 4	1.190	3- 4	0.990	3- 4	1.630	3- 4	2.120	2- 9	2.800	2- 9	3.100	1-30	3.720	1-27	5.250		
		1964		1964		1964		1964		1966		1966		1957		1957			

NOTES: Watershed conditions: About 23% in cultivation (cotton, ryegrass and corn), fair cover November to March, poor cover April and May improving to good by mid-July; 51% in pasture and idle land, good cover April to October with fair cover remainder of year; 25% in woods, good cover; 1% bare gullies. Percentages of total area in various land use categories are based on the latest survey completed in 1970. About 29% of drainage area above small desilting and retention dams. For map of watershed, see Selected Runoff Events for Small Agricultural Watersheds in the United States, ARS, SWC, January 1960, p. 62.2-3. Monthly precipitation Thiessen weighted from rain gages 8 and 33. Precipitation and runoff records began Jan. 1957. Gaging station moved Oct. 1, 1969, acreage changed from 1130 acres to 1000 acres. For long-time precipitation records, see National Weather Service records at Holly Springs, NM, Mississippi.

1970 DAILY PRECIPITATION (inches)													OXFORD, MISSISSIPPI WATERSHED W-5	
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
1	0.0	1.23	0.21	1.28	0.15	0.94	0.0	0.0	0.0	0.0	0.0	0.0		
2	0.0	0.0	0.24	0.0	0.08	0.70	0.0	0.0	0.0	0.0	0.0	0.0		
3	0.0	0.0	2.34	0.0	0.0	0.0	0.0	0.03	0.35	0.0	0.0	0.0		
4	0.0	0.0	0.0	0.0	0.0	0.18	0.0	0.0	0.15	0.0	0.0	0.0		
5	0.0	0.09	0.0	0.0	0.0	0.10	0.0	0.41	0.0	0.0	0.0	0.0		
6	0.06	0.08	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.84	0.0	0.0		
8	0.0	0.27	0.0	0.0	0.0	0.0	1.34	0.0	0.0	0.0	0.0	0.0		
9	0.0	0.0	0.0	0.0	0.05	0.0	0.0	0.23	0.0	0.94	1.14	0.0		
10	0.0	0.0	0.0	0.0	2.83	0.0	0.0	0.0	0.96	0.0	0.0	0.0		
11	0.64	0.0	0.16	0.0	0.28	0.0	0.0	0.0	0.0	0.09	0.0	0.50		
12	0.0	0.0	0.31	0.67	0.0	0.0	0.0	0.0	0.0	0.68	0.11	0.0		
13	0.0	0.0	0.0	0.05	0.0	0.16	0.0	0.0	0.0	1.75	0.34	0.0		
14	0.0	0.23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.50	0.0		
15	0.0	1.36	0.0	0.0	0.0	2.87	0.0	0.0	0.0	0.0	0.0	0.68		
16	0.0	0.0	0.0	0.09	0.76	0.0	0.0	0.58	0.0	0.0	0.0	0.27		
17	0.0	0.0	0.85	2.24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.28	0.0		
19	0.06	0.0	1.20	1.25	0.0	0.0	0.0	0.05	0.0	0.24	0.36	0.17		
20	0.0	0.0	0.03	0.0	0.0	0.0	0.50	0.25	0.0	0.03	0.0	1.19		
21	0.0	0.0	0.49	0.0	0.0	0.0	0.0	0.37	0.0	0.0	0.0	0.0		
22	0.0	0.04	0.0	0.0	0.0	0.0	0.43	0.84	0.0	0.0	0.0	0.08		
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.06	0.65	0.0	0.0	0.02		
24	0.0	0.07	0.04	0.53	0.0	0.0	0.0	0.0	0.0	0.76	0.0	0.0		
25	0.0	0.43	0.44	0.53	0.03	0.0	0.08	0.0	0.0	0.0	0.0	0.0		
26	0.0	0.0	0.0	0.48	0.0	0.0	0.0	0.0	0.50	0.0	0.0	0.0		
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
28	0.0	0.04	0.03	0.0	0.0	0.0	0.0	0.0	0.0	0.43	0.0	0.0		
29	0.33	0.0	0.0	0.0	0.49	0.0	0.0	0.0	0.0	0.0	0.0	0.02		
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.04	0.0	0.0	0.0	0.31		
31	0.0	0.0	0.0	0.44	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.09		
TOTAL	1.09	3.85	6.34	7.11	5.11	4.95	2.35	2.87	2.63	5.77	2.72	3.33		
STA AV	3.70	4.66	4.98	5.09	4.21	3.17	3.74	3.99	4.64	2.58	4.35	5.30		

NOTES: For daily air temperatures in the vicinity, see table for Watershed W-4C (p. 62.001-1). Daily precipitation values Thiessen weighted from rain gages 8 and 33. STA AV based on 14 yr (1957-70) record period.

1970 MEAN DAILY DISCHARGE (cfs) OXFORD, MISSISSIPPI WATERSHED W-5												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.383	14.725	0.0	17.836	0.0	0.196	0.0	0.0	0.0	0.0	0.0	0.0
2	0.383	4.822	0.0	5.223	0.0	3.880	0.0	0.0	0.0	0.0	0.0	0.0
3	0.431	0.191	67.947	0.825	0.0	0.967	0.0	0.0	0.0	0.0	0.0	0.0
4	0.480	0.0	5.841	0.240	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	0.431	0.0	2.711	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6	0.191	0.0	1.233	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7	0.0	0.0	0.713	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8	0.0	0.0	0.548	0.0	0.0	0.0	0.254	0.0	0.0	0.0	0.077	0.0
9	0.0	0.0	0.191	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.637	0.0
10	0.0	0.0	0.356	0.0	37.867	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11	1.890	0.0	0.939	0.0	14.824	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	1.490	0.0	0.240	0.016	0.089	0.0	0.0	0.0	0.0	0.191	0.0	0.0
13	0.0	0.0	0.191	3.097	0.0	0.0	0.0	0.0	0.0	6.991	0.0	0.0
14	0.0	0.0	0.431	0.535	0.0	0.0	0.0	0.0	0.0	0.0	0.290	0.0
15	0.0	22.956	0.480	0.535	0.0	58.958	0.0	0.0	0.0	0.0	0.148	0.306
16	0.0	3.046	0.480	0.480	0.725	0.535	0.0	0.0	0.0	0.0	0.0	0.507
17	0.0	1.069	6.081	44.896	0.535	0.431	0.0	0.0	0.0	0.0	0.0	0.0
18	0.0	0.295	2.496	1.506	0.535	0.191	0.0	0.0	0.0	0.0	0.0	0.0
19	0.0	0.0	29.128	28.122	0.535	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	0.0	4.086	2.393	0.240	0.0	0.0	0.0	0.0	0.0	0.0	9.654
21	0.0	0.0	8.752	1.262	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.231
22	0.0	0.0	5.286	1.010	0.0	0.0	0.0	0.062	0.0	0.0	0.0	0.165
23	0.0	0.0	2.647	0.850	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	0.0	0.0	1.262	0.720	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	1.529	3.068	2.033	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	0.0	0.0	3.754	10.204	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	0.0	0.0	1.275	0.876	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	0.0	0.0	1.003	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	0.0	0.0	0.926	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	0.0	0.0	0.781	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	0.0	0.0	0.781	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MEAN	0.1833	1.7369	4.9558	4.0886	1.7855	2.1720	0.0082	0.0020	0.0	0.2317	0.0384	0.5440
INCHES	0.135	1.158	3.657	2.919	1.317	1.551	0.006	0.001	0.0	0.171	0.027	0.401
STA AV	1.315	1.794	1.930	1.536	0.745	0.356	0.307	0.420	0.539	0.226	0.832	1.705

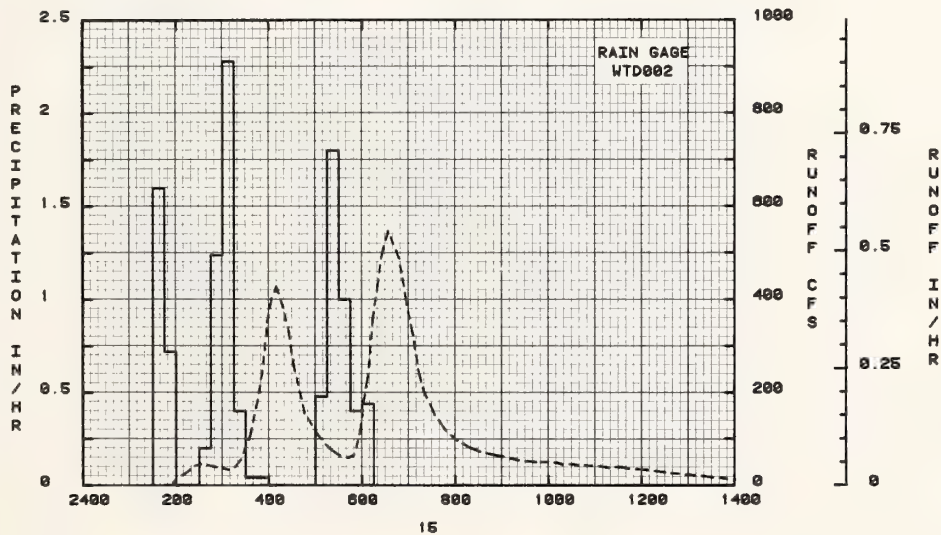
NOTES: To convert discharge in CFS to IN/DAY, multiply by 0.02380. Quality of records: Good, estimated to be within 10% of actual. STA AV based on 14 yr (1957-70) record period.

1970			SELECTED RUNOFF EVENT			WATERSHED W-5			OXFORD, MISSISSIPPI		
ANTECEDENT CONDITIONS			RAINFALL			RUNOFF					
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.	
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)	
EVENT OF JUNE 15, 1970											
RG WTD002			RG WTD002								
6-15	0.22	0.000	6-15	130	0.0	0.0	6-15	144	0.713	0.0	
				145	1.6009	0.40		148	0.850	0.0001	
				200	0.7200	0.58		156	6.631	0.0006	
				215	0.0	0.58		200	13.784	0.0013	
				230	0.0	0.58		210	24.500	0.0045	
WATERSHED CONDITIONS: About 23% of area in cultivation, primarily cotton, ryegrass and corn, poor to fair cover; 51% in pasture and idle land with fair to good cover; 25% in woods, good cover; 1% in bare gullies.				245	0.2000	0.63		218	34.328	0.0084	
				300	1.2400	0.94		224	42.200	0.0122	
				315	2.2800	1.51		232	46.400	0.0181	
				330	0.4000	1.61		240	43.400	0.0240	
				345	0.0400	1.62		252	39.800	0.0322	
				400	0.0400	1.63		302	36.168	0.0385	
				500	0.0	1.63		308	33.136	0.0415	
				515	0.4800	1.75		316	39.800	0.0467	
				530	1.8000	2.20		324	56.600	0.0531	
				545	1.0000	2.45		336	107.900	0.0694	
			600	0.4000	2.55		344	170.268	0.0878		
			615	0.4400	2.66		352	246.936	0.1154		
							358	352.468	0.1452		
							404	403.375	0.1827		
							410	428.195	0.2239		
							416	398.319	0.2649		
							426	330.135	0.3250		
							432	260.125	0.3543		
							446	156.000	0.4025		
							502	110.700	0.4378		
							518	79.200	0.4629		
							532	63.184	0.4794		
							542	59.600	0.4896		
							550	66.736	0.4980		
							558	117.695	0.5102		
							602	181.100	0.5201		
							608	239.855	0.5410		
							614	358.426	0.5706		
							620	428.195	0.6096		
							626	499.226	0.6555		

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.000992. Thiessen weighted storm rainfall, rain gages 8 and 33. For 30-day antecedent P and Q, see tables on pp. 62.002-1 and 2.

1970	SELECTED RUNOFF EVENT			OXFORD, MISSISSIPPI WATERSHED W-5						
ANTECEDENT CONDITIONS			RAINFALL				RUNOFF			
Date Mo-Day	Rainfall (inches)	Runoff (inches)	Date Mo-Day	Time of Day	Intensity (in/hr)	Acc. (inches)	Date Mo-Day	Time of Day	Rate (cfs)	Acc. (inches)
EVENT OF JUNE 15, 1970 (CONTINUED)										
							6-15	634	547.059	0.7248
								648	487.894	0.8445
								658	388.528	0.9170
								706	323.167	0.9640
								714	238.720	1.0011
								720	201.936	1.0230
								734	152.000	1.0640
								748	117.000	1.0951
								802	97.400	1.1199
								816	83.400	1.1408
								832	72.868	1.1615
								846	66.736	1.1777
								902	61.400	1.1946
								922	53.000	1.2135
								944	49.400	1.2321
								950	50.000	1.2370
								1010	48.200	1.2532
								1018	44.600	1.2593
								1030	45.200	1.2682
								1038	42.200	1.2740
								1056	41.600	1.2865
								1118	37.395	1.3009
								1132	39.800	1.3098
								1144	35.552	1.3173
								1208	32.559	1.3308
								1230	27.000	1.3416
								1300	22.000	1.3537
								1332	16.559	1.3639

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.000992. Thiessen weighted storm rainfall, rain gages 8 and 33. For 30-day antecedent P and Q, see tables on pp. 62.002-1 and 2.



EVENT OF JUNE 15, 1970
OXFORD, MISSISSIPPI WATERSHED W-5

OXFORD, MISSISSIPPI WATERSHED W-10

LOCATION: Marshall Co., Miss.; 3.3 mi. NW of Chulahoma, on County road; Dry Fork Creek, Pigeon Roost Creek Watershed, Yazoo River Basin.

AREA: 5530.00 acres 8.64 sq. miles

MONTHLY PRECIPITATION AND RUNOFF (inches)														OXFORD, MISSISSIPPI WATERSHED W-10															
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual															
1970	P	1.26	4.21	6.98	7.39	6.22	4.89	3.21	2.22	2.05	6.87	2.81	3.50	51.62															
	Q	0.094	0.968	3.053	2.399	1.536	0.713	0.056	0.011	0.011	0.275	0.009	0.119	9.242															
STA AV	P	3.84	4.91	5.05	5.17	4.68	3.17	4.01	3.80	4.56	2.65	4.54	5.53	51.91															
	Q	1.096	1.324	1.595	1.253	0.791	0.217	0.389	0.348	0.473	0.158	0.634	1.345	9.624															
ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																													
		Maximum Discharge		1 Hour		2 Hours		Maximum Volume for Selected Time Interval		6 Hours		12 Hours		1 Day		2 Days		8 Days											
		Date	Rate	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.										
1970		3- 3	0.377	3- 3	0.362	3- 3	0.655	3- 3	1.478	3- 3	1.797	3- 3	1.891	3- 3	1.976	2-26	2.139												
MAXIMUMS FOR PERIOD OF RECORD																													
		7- 9	1.180	7- 9	1.060	7- 9	1.650	2-23	2.130	2-23	2.390	12- 3	2.660	1-30	2.980	3-24	4.170												
		1967		1967		1967		1962		1962		1964		1957		1965													

NOTES: Watershed conditions: About 17% in cultivation (cotton, corn and soybeans), fair cover November to March, poor cover April and May improving to good by mid-July; 36% in pasture and idle land, good cover April to October with fair cover remainder of year; 45% in woods, good cover; 2% bare gullies. Percentages of total area in various land use categories are based on the latest survey completed in 1970. About 22% of drainage area above small desilting and retention dams. Monthly precipitation Thiessen weighted from rain gages 13, 14, 20, 24 and 26. For map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1956-59, USDA Misc. Pub. 945, p. 62.3-3. Precipitation and runoff records began Jan. 1957. Runoff estimated for 1970. For long-time precipitation records, see National Weather Service records at Holly Springs, 4W, Mississippi.

1970 DAILY PRECIPITATION (inches)														OXFORD, MISSISSIPPI WATERSHED W-10													
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec															
1	0.0	1.26	0.24	1.51	0.50	1.62	0.0	0.0	0.0	0.0	0.0	0.0															
2	0.0	0.0	0.27	0.0	0.16	1.13	0.0	0.39	0.0	0.0	0.0	0.0															
3	0.0	0.0	2.70	0.0	0.0	0.0	0.17	0.02	0.30	0.0	0.0	0.0															
4	0.0	0.0	0.0	0.0	0.0	0.07	0.09	0.0	0.17	0.0	0.0	0.0															
5	0.0	0.13	0.0	0.0	0.0	0.13	0.0	0.24	0.0	0.0	0.0	0.0															
6	0.05	0.09	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0															
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.09	0.0															
8	0.0	0.30	0.0	0.0	0.0	0.0	1.85	0.07	0.0	0.0	0.0	0.0															
9	0.0	0.0	0.0	0.0	0.08	0.0	0.0	0.36	0.0	0.96	1.24	0.0															
10	0.0	0.0	0.0	0.0	3.44	0.0	0.0	0.0	0.97	0.0	0.0	0.0															
11	0.64	0.0	0.15	0.0	0.07	0.0	0.0	0.0	0.0	0.08	0.0	0.40															
12	0.0	0.0	0.37	0.69	0.0	0.0	0.0	0.0	0.0	0.68	0.10	0.0															
13	0.0	0.0	0.0	0.01	0.0	0.19	0.0	0.0	0.03	2.38	0.34	0.0															
14	0.0	0.28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.47	0.0															
15	0.0	1.47	0.0	0.0	0.0	1.71	0.0	0.0	0.0	0.0	0.0	0.79															
16	0.0	0.0	0.0	0.07	0.74	0.0	0.0	0.00	0.0	0.0	0.0	0.18															
17	0.0	0.0	0.88	2.24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0															
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.34	0.0															
19	0.03	0.0	1.16	1.31	0.0	0.0	0.0	0.0	0.0	0.26	0.32	0.22															
20	0.0	0.0	0.05	0.0	0.0	0.0	0.52	0.08	0.0	0.01	0.0	1.30															
21	0.0	0.0	0.53	0.0	0.0	0.01	0.0	0.24	0.0	0.0	0.0	0.0															
22	0.0	0.05	0.0	0.0	0.0	0.0	0.64	0.68	0.0	0.0	0.0	0.05															
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.19	0.0	0.0	0.07															
24	0.0	0.13	0.04	0.57	0.0	0.03	0.0	0.0	0.0	0.94	0.0	0.0															
25	0.0	0.43	0.53	0.58	0.02	0.0	0.02	0.0	0.0	0.0	0.0	0.0															
26	0.0	0.0	0.0	0.41	0.0	0.00	0.0	0.0	0.39	0.0	0.0	0.0															
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0															
28	0.0	0.07	0.07	0.0	0.0	0.0	0.0	0.0	0.0	0.47	0.0	0.0															
29	0.55	0.0	0.0	0.0	0.80	0.0	0.0	0.0	0.0	0.0	0.0	0.01															
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.12	0.0	0.0	0.0	0.40															
31	0.0	0.0	0.0	0.0	0.42	0.0	0.0	0.0	0.0	0.0	0.0	0.08															
TOTAL		1.26	4.21	6.98	7.39	6.22	4.89	3.21	2.22	2.05	6.87	2.81															
STA AV		3.84	4.91	5.05	5.17	4.68	3.17	4.01	3.80	4.56	2.65	4.54															

NOTES: For daily air temperatures in the vicinity, see table for Watershed W-4C (p. 62.001-1). Daily precipitation values Thiessen weighted from rain gages 13, 14, 20, 24 and 26. STA AV based on 14 yr (1957-70) record period.

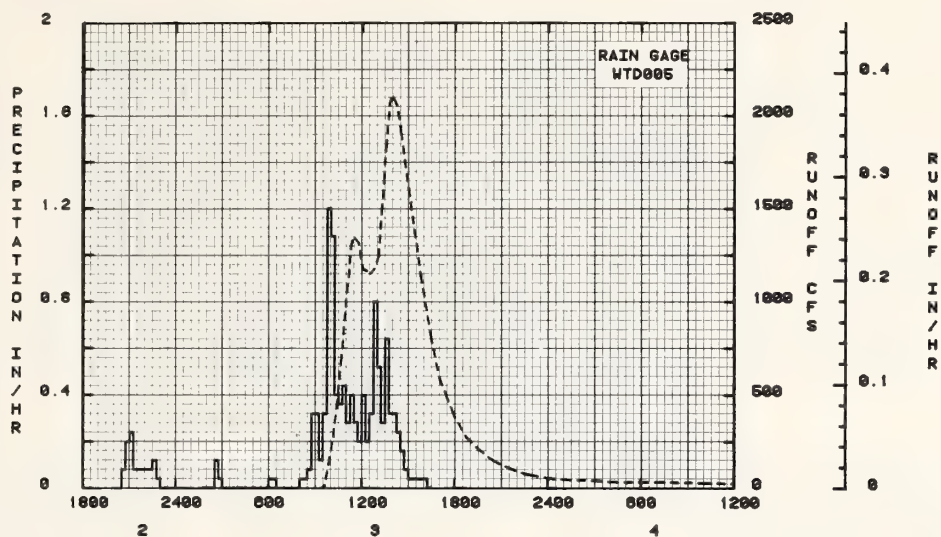
1970 MEAN DAILY DISCHARGE (cfs) OXFORD, MISSISSIPPI WATERSHED W-10												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	1.88	45.79	4.70	88.95	0.44	22.01	0.07	0.08	0.08	0.07	0.07	0.07
2	1.25	1.51	4.70	26.78	0.44	60.68	0.07	0.08	0.08	0.06	0.07	0.07
3	0.63	0.40	426.15	1.05	0.44	1.86	0.07	0.08	0.08	0.06	0.07	0.07
4	0.63	0.40	28.65	0.91	0.44	0.08	0.07	0.08	0.08	0.06	0.07	0.07
5	0.63	0.40	15.42	0.91	0.44	0.08	0.07	0.08	0.08	0.06	0.07	0.07
6	0.63	0.40	9.10	1.00	0.44	0.08	0.07	0.08	0.08	0.06	0.07	0.07
7	0.63	0.40	5.00	1.00	0.44	0.08	0.07	0.08	0.08	0.06	0.07	0.07
8	0.63	0.40	3.03	1.00	0.44	0.08	10.64	0.08	0.08	0.06	0.07	0.07
9	0.63	0.40	3.03	1.00	0.44	0.08	0.08	0.08	0.08	0.06	0.07	0.07
10	0.63	0.40	3.03	1.00	246.89	0.08	0.08	0.08	0.08	0.06	0.07	0.07
11	0.63	0.40	3.03	0.95	101.55	0.08	0.08	0.08	0.08	0.06	0.07	0.07
12	0.63	0.40	3.03	5.90	0.22	0.08	0.08	0.08	0.08	0.06	0.07	0.07
13	0.63	0.40	3.03	4.79	0.22	0.08	0.08	0.08	0.08	61.86	0.07	0.07
14	0.63	0.40	3.03	0.46	0.22	0.08	0.08	0.08	0.08	0.07	0.07	0.07
15	0.63	101.19	3.03	0.46	0.22	79.18	0.08	0.08	0.08	0.07	0.07	0.07
16	0.63	15.06	3.03	0.44	0.22	0.07	0.08	0.08	0.08	0.07	0.07	0.07
17	0.63	4.70	14.53	209.24	0.22	0.07	0.08	0.08	0.08	0.07	0.07	0.07
18	0.63	4.70	4.37	9.60	0.22	0.07	0.08	0.08	0.08	0.07	0.07	0.07
19	0.63	4.70	105.83	146.12	0.22	0.07	0.08	0.08	0.08	0.07	0.07	0.07
20	0.63	4.70	13.31	21.68	0.22	0.07	0.08	0.08	0.08	0.07	0.07	11.51
21	0.63	4.70	23.77	1.05	0.22	0.07	0.08	0.08	0.08	0.07	0.07	14.08
22	0.63	4.70	1.00	1.05	0.22	0.07	0.08	0.08	0.08	0.07	0.07	0.07
23	0.63	4.70	1.00	1.05	0.22	0.07	0.08	0.08	0.08	0.07	0.07	0.07
24	0.63	4.70	0.95	1.05	0.22	0.07	0.08	0.08	0.08	0.07	0.07	0.07
25	0.63	4.70	16.44	1.05	0.22	0.07	0.08	0.08	0.08	0.07	0.07	0.07
26	0.63	4.70	3.11	27.10	0.22	0.07	0.08	0.08	0.08	0.07	0.07	0.07
27	0.63	4.70	0.74	0.44	0.22	0.07	0.08	0.08	0.08	0.07	0.07	0.07
28	0.63	4.70	0.78	0.44	0.22	0.07	0.08	0.08	0.08	0.07	0.07	0.07
29	0.87		0.86	0.44	0.22	0.07	0.08	0.08	0.08	0.07	0.07	0.07
30	1.00		0.86	0.44	0.22	0.07	0.08	0.08	0.08	0.07	0.07	0.07
31	0.59		0.70		0.22		0.08	0.08		0.07		0.07
MEAN	0.704	8.028	22.880	18.579	11.509	5.523	0.420	0.083	0.083	2.058	0.069	0.890
INCHES	0.094	0.968	3.053	2.399	1.536	0.713	0.056	0.011	0.011	0.275	0.009	0.119
STA AV	1.096	1.324	1.595	1.253	0.791	0.217	0.389	0.348	0.473	0.158	0.634	1.345

NOTES: To convert discharge in CFS to IN/DAY, multiply by 0.0043041. Quality of records: Poor, estimated to be within 20% of actual. Discharge for entire year based on temporary gage established approximately 200 feet downstream from original gage on bridge which burned. STA AV based on 13 yr (Jan. 1957 thru Sept. 1965 and Oct. 1966 thru Dec. 1970) record period.

1970 SELECTED RUNOFF EVENT			OXFORD, MISSISSIPPI WATERSHED W-10							
ANTECEDENT CONDITIONS			RAINFALL			RUNOFF				
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)
EVENT OF MARCH 2 - 4, 1970										
RG WTD005			RG WTD005							
3- 2	0.0		3- 2	2030	0.0	0.0	3- 3	926	1.105	0.0
3- 3		0.005		2045	0.0800	0.02		938	15.472	0.0003
				2100	0.2000	0.07		952	128.000	0.0033
				2115	0.2400	0.13		1010	278.272	0.0142
				2130	0.0800	0.15		1026	473.955	0.0322
WATERSHED CONDITIONS: About 17% of area in cultivation, primarily cotton, corn, and soybeans, poor to fair cover; 36% in pasture and idle land, fair cover; 45% in woods, good cover; 2% in bare gullies.				2145	0.0800	0.17		1042	715.000	0.0606
				2200	0.0800	0.19		1102	1055.999	0.1135
				2215	0.0800	0.21		1108	1133.999	0.1332
				2230	0.0800	0.23		1116	1288.477	0.1622
				2245	0.1200	0.26		1122	1327.499	0.1856
				2300	0.0400	0.27		1132	1340.499	0.2255
				2315	0.0	0.27		1148	1307.999	0.2888
				2330	0.0	0.27		1202	1175.977	0.3408
			3- 3	145	0.0	0.27		1218	1163.997	0.3967
				200	0.0008	0.27		1232	1151.998	0.4452
				215	0.0010	0.27		1248	1175.977	0.5009
				230	0.0	0.27		1304	1242.677	0.5588
				245	0.1200	0.30		1318	1522.499	0.6166
				300	0.0400	0.31		1326	1696.999	0.6551
				315	0.0	0.31		1332	1830.000	0.6868
				330	0.0	0.31		1346	2060.999	0.7682
				345	0.0	0.31		1350	2088.997	0.7930
				400	0.0	0.31		1358	2102.997	0.8431
				415	0.0	0.31		1414	2053.997	0.9425
				430	0.0	0.31		1434	1871.997	1.0599
				445	0.0	0.31		1504	1567.917	1.2141
				500	0.0	0.31		1548	1140.000	1.3921
				515	0.0	0.31		1632	779.520	1.5183
				530	0.0	0.31		1702	590.000	1.5797
				545	0.0	0.31		1736	465.998	1.6334

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.0001793. Thiessen weighted storm rainfall, rain gages 13, 14, 20, 24 and 26. For 30-day antecedent P and Q, see tables on pp. 62.003-1 and 2.

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.0001793. Thiessen weighted storm rainfall, rain gages 13, 14, 20, 24 and 26. For 30-day antecedent P and Q, see tables on pp. 62.003-1 and 2.



EVENT OF MARCH 2 - 4, 1970
 OXFORD, MISSISSIPPI WATERSHED W-10

OXFORD, MISSISSIPPI WATERSHED W-12

LOCATION: Marshall Co., Miss.; 5.6 mi. SW of Holly Springs, on county road; Pigeon Roost Creek Watershed, Yazoo River Basin.

AREA: 22800.00 acres 35.60 sq. miles

MONTHLY PRECIPITATION AND RUNOFF (inches)														OXFORD, MISSISSIPPI WATERSHED W-12													
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual													
1970	P	1.20	4.19	6.21	7.38	4.98	5.20	2.85	3.03	2.49	6.05	2.70	3.78	50.08													
	Q	0.137	0.798	1.649	2.029	0.924	0.828	0.082	0.031	0.015	0.171	0.034	0.175	7.074													
STA AV	P	3.67	4.68	4.85	5.00	4.27	3.19	3.92	3.85	4.46	2.54	4.33	5.24	50.01													
	Q	0.718	1.056	1.177	0.887	0.531	0.212	0.233	0.254	0.294	0.112	0.438	0.877	6.789													
ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																											
		Maximum Discharge				1 Hour				Maximum Volume for Selected Time Interval				2 Days													
		Date	Rate	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.
1970		3- 3	0.170	3- 3	0.167	3- 3	0.318	3- 3	0.813	3- 3	1.033	3- 3	1.082	3- 3	1.113	4-17	1.289										
MAXIMUMS FOR PERIOD OF RECORD																											
		2-23	0.350	2-23	0.350	2-23	0.680	2-23	1.380	2-23	1.620	11-27	1.930	1-30	2.280	3-24	4.360										
		1962		1962		1962		1962		1962		1968		1957		1965											

NOTES: Watershed conditions: About 16% in cultivation (cotton, corn, soybeans, ryegrass), fair cover November to March, poor cover April and May improving to good by mid-July; 29% in pasture and idle land, good cover April to October with fair cover remainder of year; 47% in woods, good cover; 1% in bare gullies; 7% urban. Percentages of total area in various land use categories are based on the latest survey completed in 1970. About 18% of drainage area above small desilting and retention dams. For map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1956-59, USDA disc. Pub. 945, p. 62.4-6. Monthly precipitation Thiessen weighted from 16 rain gages. Precipitation and runoff records began Jan. 1957. For long-time precipitation records, see National Weather Service records at Holly Springs, 4N, Mississippi.

1970 DAILY PRECIPITATION (inches)														OXFORD, MISSISSIPPI WATERSHED W-12									
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec											
1	0.0	1.22	0.16	1.51	0.26	0.93	0.0	0.09	0.0	0.0	0.0	0.0	0.0										
2	0.0	0.0	0.24	0.0	0.11	0.82	0.0	0.03	0.0	0.0	0.0	0.0	0.0										
3	0.0	0.0	2.34	0.0	0.0	0.0	0.00	0.24	0.34	0.0	0.0	0.0	0.0										
4	0.0	0.0	0.0	0.0	0.0	0.14	0.00	0.11	0.12	0.0	0.0	0.0	0.0										
5	0.0	0.08	0.0	0.0	0.0	0.0	0.05	0.0	0.28	0.0	0.0	0.0	0.02										
6	0.05	0.07	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0										
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.55	0.0	0.0	0.0										
8	0.0	0.24	0.0	0.0	0.0	0.0	0.59	0.0	0.0	0.0	1.0	0.0	0.0										
9	0.0	0.0	0.0	0.0	0.11	0.0	0.0	0.24	0.0	0.86	1.16	0.0	0.0										
10	0.01	0.0	0.0	0.0	2.56	0.0	0.0	0.0	1.10	0.0	0.0	0.0	0.0										
11	0.64	0.0	0.17	0.0	0.24	0.0	0.0	0.0	0.0	0.12	0.0	0.45	0.0										
12	0.0	0.0	0.33	0.61	0.0	0.0	0.0	0.0	0.0	0.64	0.07	0.0	0.0										
13	0.0	0.0	0.0	0.04	0.0	0.65	0.0	0.0	0.01	2.02	0.31	0.0	0.0										
14	0.0	0.62	0.0	0.0	0.0	0.0	0.0	0.02	0.0	0.0	0.48	0.0	0.0										
15	0.0	1.37	0.0	0.0	0.0	2.34	0.0	0.0	0.0	0.0	0.0	0.65	0.0										
16	0.0	0.0	0.0	0.07	0.73	0.0	0.0	0.34	0.0	0.0	0.0	0.24	0.0										
17	0.0	0.0	0.82	2.40	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0										
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.31	0.0	0.0										
19	0.02	0.0	1.02	1.14	0.0	0.0	0.0	0.01	0.0	0.21	0.37	0.20	0.0										
20	0.0	0.0	0.05	0.0	0.0	0.01	0.74	0.60	0.0	0.03	0.0	1.45	0.0										
21	0.0	0.0	0.49	0.0	0.0	0.0	0.0	0.25	0.0	0.0	0.0	0.00	0.0										
22	0.0	0.04	0.0	0.0	0.0	0.3	0.43	0.60	0.0	0.0	0.0	0.16	0.0										
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.18	0.56	0.0	0.0	0.17	0.0										
24	0.0	0.09	0.03	0.63	0.01	0.24	0.0	0.0	0.0	0.77	0.0	0.0	0.0										
25	0.0	0.39	0.48	0.58	0.04	0.0	0.09	0.0	0.0	0.0	0.0	0.0	0.0										
26	0.0	0.0	0.0	0.40	0.0	0.01	0.0	0.0	0.35	0.0	0.0	0.0	0.0										
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0										
28	0.0	0.06	0.07	0.0	0.0	0.0	0.0	0.0	0.0	0.43	0.0	0.0	0.0										
29	0.48	0.0	0.0	0.0	0.51	0.0	0.0	0.0	0.0	0.0	0.0	0.03	0.0										
30	0.0	0.0	0.0	0.0	0.02	0.0	0.0	0.04	0.0	0.0	0.0	0.34	0.0										
31	0.0	0.0	0.0	0.0	0.40	0.0	0.0	0.0	0.0	0.0	0.0	0.07	0.0										
TOTAL	1.20	4.19	6.21	7.38	4.98	5.20	2.85	3.03	2.49	6.05	2.70	3.78											
STA AV	3.67	4.68	4.85	5.00	4.27	3.19	3.92	3.85	4.46	2.54	4.33	5.24											

NOTES: For daily air temperatures in the vicinity, see table for Watershed W-9C (p. 62.001-1). Daily precipitation values Thiessen weighted from rain gages 4 thru 9, 13, 15, 18 thru 20, 25, 29 thru 31 and 33. STA AV based on 14 yr (1957-70) record period.

1970 MEAN DAILY DISCHARGE (cfs) OXFORD, MISSISSIPPI WATERSHED W-12												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	9.1	134.9	3.7	274.8	8.7	6.7	2.4	1.7	0.5	0.5	1.3	0.7
2	8.1	31.3	4.1	98.0	7.8	71.3	2.3	1.5	0.5	0.4	1.3	0.7
3	6.7	7.8	1005.7	10.4	7.2	22.2	2.0	1.4	0.5	0.2	1.3	0.7
4	6.0	6.1	59.5	9.1	6.5	5.2	1.9	1.4	0.5	0.2	1.3	0.7
5	5.2	4.6	17.7	9.3	6.7	4.5	1.9	1.4	0.5	0.2	1.3	0.7
6	4.7	4.6	9.8	8.1	6.5	3.4	1.7	1.4	0.5	0.2	1.3	0.7
7	4.5	4.6	8.6	6.9	6.5	3.0	1.5	1.4	0.5	0.2	1.3	0.7
8	4.3	4.6	8.2	6.5	6.7	2.7	20.6	1.4	0.5	0.2	1.3	0.7
9	4.3	4.0	8.2	6.3	6.7	2.2	2.7	1.4	0.5	0.7	5.9	0.7
10	4.2	3.1	6.6	6.5	377.2	1.8	2.1	1.3	0.9	0.4	0.9	0.9
11	14.9	2.9	9.1	6.5	328.3	2.0	2.1	1.1	0.5	0.3	0.7	1.4
12	7.2	2.8	9.3	6.4	20.4	1.9	2.0	1.1	0.5	0.5	0.5	1.0
13	3.0	2.8	8.3	21.8	8.2	28.6	1.9	0.9	0.5	128.8	0.6	0.7
14	2.9	31.1	6.9	6.7	7.8	7.6	1.7	0.8	0.5	2.7	2.8	0.7
15	2.6	362.7	6.7	5.5	9.2	567.7	1.5	0.8	0.5	1.8	1.0	1.2
16	2.5	50.0	5.3	5.0	17.0	7.3	1.5	0.8	0.5	1.6	0.5	3.1
17	2.6	18.4	30.1	768.1	6.1	3.7	1.5	0.8	0.5	1.7	0.4	0.9
18	2.5	10.0	11.5	29.8	3.8	3.7	1.5	0.8	0.5	1.7	0.7	0.4
19	2.2	10.8	276.3	322.0	3.2	3.2	1.5	0.8	0.5	1.7	0.6	0.4
20	1.9	9.9	37.3	46.4	3.2	2.7	8.2	2.3	0.5	1.7	1.9	84.0
21	1.9	8.2	70.3	17.3	3.2	2.6	1.4	0.4	0.5	1.7	0.6	45.4
22	2.3	8.2	30.4	13.1	3.2	2.5	1.4	1.1	0.5	1.7	0.7	1.9
23	2.7	7.8	15.6	12.2	3.1	3.0	1.4	0.7	0.5	1.7	0.7	10.3
24	2.7	7.2	11.3	45.4	3.0	17.8	1.4	0.4	0.5	1.7	0.7	2.6
25	2.6	9.9	15.6	49.4	3.2	4.1	1.4	0.4	0.5	1.7	0.7	1.3
26	2.2	6.9	34.3	112.4	3.2	2.1	1.4	0.4	0.5	1.7	0.7	0.9
27	2.1	5.3	13.1	16.4	2.9	2.5	1.4	0.4	0.5	1.7	0.7	0.9
28	2.5	3.9	12.2	10.1	3.1	2.6	1.4	0.4	0.5	1.7	0.7	0.8
29	5.1		11.9	7.3	3.9	2.6	1.4	0.4	0.5	1.7	0.7	0.7
30	4.6		11.3	6.0	3.9	2.5	1.5	0.5	0.5	1.3	0.7	1.0
31	3.5		10.6		3.8		1.7	0.5		1.1		1.6
MEAN	4.235	27.299	57.137	64.779	28.537	26.450	2.529	0.963	0.481	5.287	1.100	5.420
INCHES	0.137	0.798	1.849	2.029	0.924	0.828	0.082	0.031	0.015	0.171	0.034	0.175
STA AV	0.718	1.056	1.177	0.887	0.531	0.212	0.233	0.254	0.294	0.112	0.438	0.877

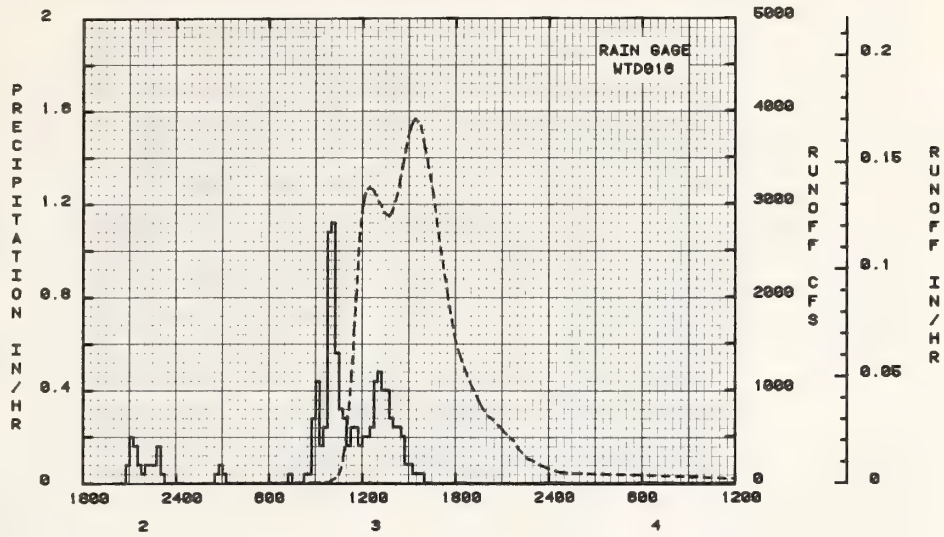
NOTES: To convert discharge in CFS to IN/DAY, multiply by 0.0010439. Quality of records: Good, estimated to be within 10% of actual. STA AV based on 14 yr (1957-70) record period.

1970 SELECTED RUNOFF EVENT OXFORD, MISSISSIPPI WATERSHED W-12											
ANTECEDENT CONDITIONS			RAINFALL			RUNOFF					
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Date	Acc.	
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)	
EVENT OF MARCH 2 - 5, 1970											
FG WTD016											
3- 2	0.0		3- 2	2015	0.0	0.0	3- 3	418	5.347	0.0	
3- 3		0.001		2030	0.0	0.0		434	6.691	0.0001	
				2045	0.0	0.0		556	7.418	0.0005	
				2100	0.0800	0.02		852	8.198	0.0015	
				2115	0.2000	0.07		916	10.000	0.0017	
WATERSHED CONDITIONS:											
About 16% in cultivation, primarily cotton, corn, soybeans, ryegrass, poor to fair cover; 29% in pasture and idle land, fair to good cover; 47% in woods, good cover; 1% in bare gullies; 7% urban.											
				2130	0.1600	0.11		938	12.160	0.0019	
				2145	0.0800	0.13		950	16.710	0.0020	
				2200	0.0400	0.14		1000	29.832	0.0022	
				2215	0.0800	0.16		1016	56.024	0.0027	
				2230	0.0800	0.18		1030	101.813	0.0035	
				2245	0.0800	0.20		1040	169.760	0.0045	
				2300	0.1600	0.24		1052	385.797	0.0065	
				2315	0.0400	0.25		1100	576.000	0.0097	
				2330	0.0	0.25		1108	795.999	0.0137	
				2345	0.0	0.25		1118	1137.999	0.0207	
			3- 3	2400	0.0010	0.25		1130	1730.000	0.0332	
				145	0.0	0.25		1138	2073.836	0.0442	
				200	0.0001	0.25		1148	2609.998	0.0612	
				215	0.0007	0.25		1200	2969.998	0.0855	
				230	0.0	0.25		1212	3113.997	0.1120	
				245	0.0397	0.26		1220	3161.998	0.1302	
				300	0.0800	0.28		1228	3177.998	0.1486	
				315	0.0400	0.29		1238	3153.996	0.1716	
				330	0.0	0.29		1252	3089.998	0.2033	
				345	0.0	0.29		1302	3025.997	0.2255	
				400	0.0	0.29		1314	2969.998	0.2516	
				415	0.0	0.29		1324	2905.998	0.2729	
				430	0.0	0.29		1334	2881.997	0.2939	
				445	0.0	0.29		1344	2865.997	0.3147	
				500	0.0	0.29		1400	2953.997	0.3485	
				515	0.0	0.29		1416	3113.997	0.3837	
				530	0.0	0.29		1428	3305.836	0.4116	
				545	0.0	0.29		1436	3405.279	0.4311	
				600	0.0	0.29		1446	3576.998	0.4564	
				615	0.0	0.29		1500	3774.998	0.4937	

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.0000435. Thiessen weighted storm rainfall, rain gages 4 thru 9, 13, 15, 18 thru 20, 25, 29 thru 31 and 33. For 30-day antecedent F and Q, see tables on pp. 62.004-1 and 2. page.

1970	SELECTED RUNOFF EVENT					OXFORD, MISSISSIPPI			WATERSHED W-12		
ANTECEDENT CONDITIONS			RAINFALL				RUNOFF				
Date Mo-Day	Rainfall (inches)	Runoff (inches)	Date Mo-Day	Time of Day	Intensity (in/hr)	Acc. (inches)	Date Mo-Day	Time of Day	Rate (cfs)	Acc. (inches)	
EVENT OF MARCH 2 - 5, 1970 (CONTINUED)											
3- 3	630	0.0	0.29	3- 3	1516	3891.994	0.5382				
	645	0.0	0.29		1522	3910.000	0.5551				
	700	0.0	0.29		1534	3882.994	0.5890				
	715	0.0	0.29		1546	3837.997	0.6226				
	730	0.0400	0.30		1600	3621.996	0.6605				
	745	0.0	0.30		1616	3387.356	0.7011				
	800	0.0	0.30		1632	3137.997	0.7389				
	815	0.0	0.30		1650	2753.995	0.7773				
	830	0.0400	0.31		1732	1974.373	0.8493				
	845	0.0400	0.32		1746	1743.999	0.8682				
	900	0.2800	0.39		1802	1505.837	0.8870				
	915	0.4400	0.50		1824	1311.999	0.9095				
	930	0.1600	0.54		1846	1150.000	0.9291				
	945	0.2400	0.60		1910	1000.000	0.9478				
	1000	1.0803	0.87		1930	874.000	0.9614				
	1015	1.1200	1.15		1952	771.685	0.9745				
	1030	0.5600	1.29		2004	719.360	0.9810				
	1045	0.3200	1.37		2024	680.000	0.9911				
	1100	0.2800	1.44		2046	610.000	1.0014				
	1115	0.1600	1.48		2116	515.918	1.0137				
	1130	0.2400	1.54		2132	480.000	1.0195				
	1145	0.2400	1.60		2146	452.759	1.0242				
	1200	0.1600	1.64		2200	369.687	1.0284				
	1215	0.2004	1.69		2218	321.632	1.0329				
	1230	0.2000	1.74		2238	259.195	1.0371				
	1245	0.2400	1.80		2304	228.536	1.0417				
	1300	0.4400	1.91		2324	190.656	1.0447				
	1315	0.4800	2.03		2400	150.224	1.0491				
	1330	0.4000	2.13	3- 4	44	109.986	1.0532				
	1345	0.4000	2.23		138	99.784	1.0573				
	1400	0.2800	2.30		332	90.174	1.0651				
	1415	0.2400	2.36		558	79.932	1.0741				
	1430	0.2400	2.42		1338	45.000	1.0949				
	1445	0.2000	2.47		1904	36.088	1.1045				
	1500	0.0800	2.49		2400	24.914	1.1110				
	1515	0.0800	2.51	3- 5	2400	10.510	1.1295				
	1530	0.0400	2.52								
	1545	0.0400	2.53								
	1600	0.0400	2.54								
	1615	0.0	2.54								
	1630	0.0	2.54								

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.0000435. Thiessen weighted storm rainfall, rain gages # thru 9, 13, 15, 16 thru 20, 25, 29 thru 31 and 33. For 30-day antecedent P and Q, see tables on pp. 62.004-1 and 2. page.



EVENT OF MARCH 2 - 5, 1970
OXFORD, MISSISSIPPI WATERSHED W-12

OXFORD, MISSISSIPPI WATERSHED W-17

LOCATION: Marshall Co., Miss.; 7.8 mi. SW of Holy Springs on County road; Pigeon Boost Creek Watershed, Yazoo River Basin.

AREA: 32100.00 acres 50.20 sq. miles

MONTHLY PRECIPITATION AND RUNOFF (inches)														OXFORD, MISSISSIPPI WATERSHED W-17	
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual	
1970	P	1.22	4.41	6.36	7.59	5.13	5.37	3.01	2.75	2.29	6.04	2.67	3.94	50.79	
	Q	0.496	1.200	2.266	2.569	1.092	1.299	0.279	0.221	0.192	0.333	0.232	0.468	10.644	
STA AV	P	3.72	4.74	4.87	5.08	4.29	3.21	4.00	3.99	4.32	2.52	4.31	5.31	50.37	
	Q	1.045	1.394	1.543	1.237	0.833	0.404	0.459	0.523	0.483	0.296	0.692	1.186	10.093	
ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS															
		Maximum Discharge		1 Hour		2 Hours		Maximum Volume for Selected Time Interval				1 Day		2 Days	
		Date	Rate	Date	Vol.	Date	Vol.	6 Hours		12 Hours		Date	Vol.	Date	Vol.
1970		3- 3	0.162	3- 3	0.161	3- 3	0.317	3- 3	0.834	3- 3	1.100	3- 3	1.194	3- 3	1.247
														4-17	1.521
MAXIMUMS FOR PERIOD OF RECORD															
		2-23	0.210	2-23	0.210	2-23	0.410	2-23	1.120	2-23	1.500	12- 3	2.010	3-24	2.390
		1962		1962		1962		1962		1962		1964		1965	4-680

NOTES: Watershed conditions: About 18% in cultivation (cotton, corn, soybeans and ryegrass), fair cover November to March, poor cover April and May improving to good by mid-July; 28% in pasture and idle land, good cover April to October with fair cover remainder of year; 48% in woods, good cover; 1% in bare gullies; 5% urban. Percentages of total area in various land use categories are based on the latest surveys completed 1965-73. About 18% of drainage area above small desilting and retention dams. For map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1956-59, USDA Misc. Pub. 945, p. 62.5-5. Monthly precipitation Thiessen weighted from 21 rain gages. Precipitation and runoff records began Jan. 1957. For long-time precipitation records, see National Weather Service records at Holly Springs 4N, Mississippi.

1970 DAILY PRECIPITATION (inches)														OXFORD, MISSISSIPPI WATERSHED W-17	
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec			
1	0.0	1.24	0.15	1.60	0.35	1.26	0.0	0.06	0.0	0.0	0.0	0.0			
2	0.0	0.0	0.24	0.0	0.14	0.89	0.0	0.06	0.0	0.0	0.00	0.0			
3	0.0	0.0	2.45	0.0	0.0	0.0	0.01	0.24	0.31	0.0	0.0	0.0			
4	0.0	0.0	0.0	0.0	0.0	0.12	0.00	0.10	0.11	0.0	0.0	0.0			
5	0.0	0.09	0.0	0.0	0.0	0.05	0.0	0.34	0.0	0.0	0.0	0.0			
6	0.05	0.06	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
8	0.0	0.23	0.0	0.0	0.0	0.0	1.74	0.00	0.0	0.0	0.0	0.0			
9	0.0	0.0	0.0	0.0	0.15	0.0	0.0	0.25	0.0	0.88	1.15	0.0			
10	0.01	0.0	0.0	0.0	2.66	0.0	0.0	0.0	1.08	0.0	0.0	0.0			
11	0.63	0.0	0.17	0.0	0.18	0.0	0.0	0.0	0.0	0.13	0.0	0.44			
12	0.0	0.0	0.35	0.63	0.0	0.0	0.0	0.0	0.0	0.62	0.07	0.0			
13	0.0	0.0	0.0	0.03	0.0	0.58	0.0	0.0	0.01	2.01	0.30	0.0			
14	0.0	0.73	0.0	0.0	0.0	0.0	0.0	0.01	0.0	0.0	0.49	0.0			
15	0.0	1.47	0.0	0.0	0.0	2.33	0.0	0.0	0.0	0.0	0.0	0.65			
16	0.0	0.0	0.0	0.06	0.71	0.0	0.0	0.26	0.0	0.0	0.0	0.22			
17	0.0	0.0	0.82	2.47	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.31	0.0			
19	0.02	0.0	0.99	1.15	0.0	0.0	0.0	0.01	0.00	0.20	0.35	0.21			
20	0.0	0.0	0.05	0.0	0.0	0.01	0.69	0.45	0.0	0.03	0.0	1.53			
21	0.0	0.0	0.51	0.0	0.0	0.01	0.0	0.26	0.0	0.0	0.0	0.00			
22	0.0	0.04	0.0	0.0	0.0	0.0	0.45	0.49	0.0	0.0	0.0	0.18			
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.18	0.47	0.0	0.0	0.23			
24	0.0	0.09	0.03	0.67	0.00	0.18	0.0	0.0	0.0	0.81	0.0	0.0			
25	0.0	0.40	0.51	0.61	0.04	0.0	0.13	0.0	0.0	0.0	0.0	0.0			
26	0.0	0.0	0.0	0.38	0.0	0.01	0.0	0.0	0.31	0.0	0.0	0.0			
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
28	0.0	0.06	0.08	0.0	0.0	0.0	0.0	0.0	0.0	0.46	0.0	0.0			
29	0.51	0.0	0.0	0.0	0.49	0.0	0.0	0.0	0.0	0.0	0.0	0.03			
30	0.0	0.0	0.0	0.0	0.01	0.0	0.0	0.03	0.0	0.0	0.0	0.35			
31	0.0	0.0	0.0	0.0	0.39	0.0	0.0	0.0	0.0	0.0	0.0	0.07			
TOTAL	1.22	4.41	6.36	7.59	5.13	5.37	3.01	2.75	2.29	6.04	2.67	3.94			
STA AV	3.72	4.74	4.87	5.08	4.29	3.21	4.00	3.99	4.32	2.52	4.31	5.31			

NOTES: For daily air temperatures in the vicinity, see table for Watershed W-4C (p.62.001-1). Daily precipitation values Thiessen weighted from rain gages 2, 4 thru 9, 13 thru 15, 17 thru 20, 22, 25, 28 thru 31. STA AV based on 14 yr (1957-70) record period.

1970 MEAN DAILY DISCHARGE (cfs) OXFORD, MISSISSIPPI WATERSHED W-17												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	34.9	221.8	12.7	467.1	31.8	70.5	10.9	9.1	8.0	8.2	7.7	10.3
2	33.9	83.0	13.2	189.3	24.6	307.7	9.9	9.1	8.0	7.7	7.7	10.3
3	32.5	16.8	1521.6	34.2	17.0	67.5	9.5	9.5	8.0	7.7	7.7	10.3
4	32.5	12.0	152.6	24.5	15.6	17.0	9.5	9.9	8.0	7.7	7.7	10.7
5	32.1	12.0	45.3	22.4	15.3	16.4	9.5	10.3	8.0	7.7	7.7	11.1
6	29.7	12.2	29.7	21.7	15.9	15.9	9.5	10.7	8.0	7.7	7.7	11.1
7	27.9	12.2	25.3	20.6	16.1	14.8	9.5	10.7	8.0	7.7	7.7	11.1
8	26.5	11.6	22.4	19.9	15.9	14.3	70.9	10.1	8.0	8.0	7.7	11.1
9	25.7	12.0	22.1	19.9	17.4	14.1	12.5	9.5	8.0	10.8	24.4	11.1
10	24.8	12.2	21.7	20.6	701.2	13.6	11.3	9.5	12.0	7.8	11.6	11.1
11	24.0	11.1	22.1	20.3	341.2	13.1	10.7	9.5	8.7	8.4	9.9	12.2
12	24.0	10.7	30.4	20.5	22.5	12.7	10.7	9.5	8.7	10.0	9.3	12.7
13	24.0	10.9	23.3	56.7	12.9	27.9	10.7	9.5	8.7	196.6	9.9	11.6
14	24.0	91.7	21.3	20.7	12.4	17.0	10.7	9.5	8.7	10.7	14.4	10.9
15	22.5	810.2	20.3	18.3	11.6	928.0	10.7	9.5	8.7	8.7	11.8	12.4
16	19.6	110.6	18.9	17.9	20.2	25.4	10.3	9.5	8.7	8.5	10.3	17.0
17	18.6	24.5	91.3	1242.5	14.2	13.6	9.9	9.5	8.7	8.5	9.9	12.2
18	18.9	15.2	48.5	55.6	12.7	12.0	9.9	9.5	9.1	8.5	9.9	11.6
19	17.9	12.5	418.8	497.6	12.9	11.6	9.3	9.5	9.1	8.7	11.2	11.6
20	16.7	11.6	65.8	87.0	12.9	11.6	21.1	12.6	8.7	8.7	14.5	138.3
21	16.1	11.6	120.4	41.8	12.2	10.9	8.4	10.0	8.7	8.4	10.9	103.7
22	15.3	11.6	54.0	33.9	11.3	10.3	8.7	10.0	8.7	8.0	10.9	10.9
23	14.6	11.3	27.6	31.1	11.1	10.7	9.1	12.7	8.7	7.7	10.7	42.5
24	14.3	11.6	22.1	97.3	11.3	25.2	9.1	9.1	8.7	9.6	10.3	16.0
25	14.1	20.1	35.7	98.6	11.8	13.1	9.1	9.1	8.7	8.4	10.3	13.8
26	14.1	13.4	80.5	193.2	11.8	11.1	9.1	8.7	8.7	8.0	10.3	13.6
27	13.4	11.6	20.5	32.4	11.3	10.7	9.1	8.4	8.7	7.7	10.3	13.4
28	12.2	12.0	17.3	22.5	11.1	11.3	9.1	8.4	8.7	8.2	10.3	13.1
29	20.0		17.3	19.2	12.0	11.8	9.1	8.4	8.7	8.4	10.3	13.4
30	12.2		17.0	17.3	12.0	11.6	9.1	8.4	8.7	7.8	10.3	15.5
31	11.3		15.9		12.0		9.1	8.2		7.8		16.7
MEAN	21.56	57.78	98.56	115.48	47.49	58.37	12.12	9.60	8.64	14.47	10.42	20.36
INCHES	0.496	1.200	2.266	2.569	1.092	1.299	0.279	0.221	0.192	0.333	0.232	0.468
STA AV	1.045	1.394	1.543	1.237	0.833	0.404	0.459	0.523	0.483	0.296	0.692	1.186

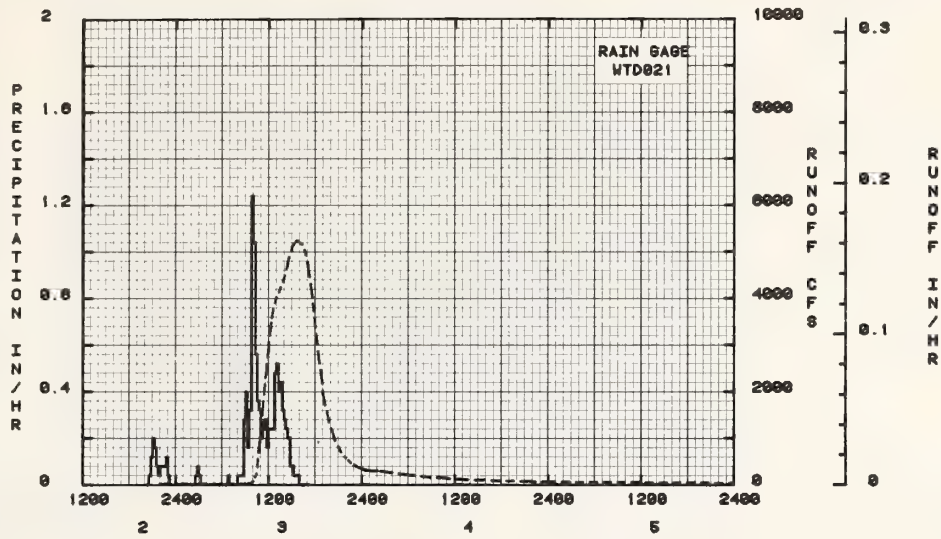
NOTES: To convert discharge in CFS to IN/DAY, multiply by 0.0007415. Quality of records: Good, estimated to be within 10% of actual. STA AV based on 14 yr (1957-70) record period.

1970 SELECTED RUNOFF EVENT OXFORD, MISSISSIPPI WATERSHED W-17												
ANTECEDENT CONDITIONS			RAINFALL				RUNOFF					
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.		
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)		
EVENT OF MARCH 2 - 7, 1970												
RG WTD021			RG WTD021									
3- 2	0.0	0.009	3- 2	2015	0.0	0.0	3- 2	2158	15.321	0.0		
				2030	0.0	0.0		2304	18.890	0.0006		
				2045	0.0400	0.01		2400	17.000	0.0011		
				2100	0.1200	0.04	3- 3	132	18.240	0.0019		
				2115	0.2000	0.09		304	18.240	0.0028		
WATERSHED CONDITIONS:				2130	0.1600	0.13		602	18.240	0.0045		
About 18% of area in cultivation, primarily cotton,				2145	0.0800	0.15		642	18.240	0.0049		
corn, soybeans and ryegrass,				2200	0.0400	0.16		734	20.960	0.0054		
poor to fair cover; 28% in				2215	0.0800	0.18		826	22.440	0.0060		
pasture and idle land, fair to				2230	0.0800	0.20		902	23.210	0.0064		
good cover; 48% in woods, good				2245	0.0800	0.22		922	26.521	0.0067		
cover; 1% in bare gullies;				2300	0.1200	0.25		934	32.050	0.0069		
5% urban.				2315	0.0400	0.26		948	41.874	0.0072		
				2330	0.0	0.26		1002	84.000	0.0077		
				2345	0.0	0.26		1018	169.008	0.0087		
				2400	0.0007	0.26		1028	240.768	0.0098		
			3- 3	145	0.0	0.26		1038	550.000	0.0118		
				200	0.0001	0.26		1044	772.500	0.0138		
				215	0.0006	0.26		1056	1031.678	0.0194		
				230	0.0	0.26		1108	1343.999	0.0267		
				245	0.0400	0.27		1118	1787.999	0.0348		
				300	0.0800	0.29		1132	2153.996	0.0490		
				315	0.0400	0.30		1146	2591.996	0.0661		
				330	0.0	0.30		1156	2861.995	0.0801		
				345	0.0	0.30		1202	3059.996	0.0893		
				400	0.0	0.30		1218	3479.997	0.1162		
				415	0.0	0.30		1222	3587.999	0.1235		
				430	0.0	0.30		1234	3774.401	0.1463		
				445	0.0	0.30		1248	3909.374	0.1740		
				500	0.0	0.30		1300	4015.729	0.1985		
				515	0.0	0.30		1318	4141.660	0.2363		
				530	0.0	0.30		1330	4235.711	0.2622		
				545	0.0	0.30		1348	4355.500	0.3020		
				600	0.0	0.30		1404	4489.984	0.3385		
				615	0.0	0.30		1420	4690.457	0.3763		

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.0000309. Thiessen weighted storm rainfall, rain gages 2, 4 thru 9, 13 thru 15, 17 thru 20, 22, 25, 28 thru 31 and 33. For 30-day antecedent P and Q, see tables on pp. 62.005-1 and 2.

1970			SELECTED RUNOFF EVENT			OXFORD, MISSISSIPPI			WATERSHED W-17		
ANTECEDENT CONDITIONS			RAINFALL			RUNOFF					
Date Mo-Day	Rainfall (inches)	Runoff (inches)	Date Mo-Day	Time of Day	Intensity (in/hr)	Acc. (inches)	Date Mo-Day	Time of Day	Rate (cfs)	Acc. (inches)	
EVENT OF MARCH 2 - 7, 1970 (CONTINUED)											
3- 3	630	0.0	0.30	3- 3	1436	4890.613	0.4158				
	645	0.0	0.30		1502	5125.609	0.4829				
	700	0.0400	0.31		1516	5184.238	0.5201				
	715	0.0	0.31		1530	5229.359	0.5576				
	730	0.0	0.31		1542	5241.656	0.5899				
	745	0.0	0.31		1558	5194.570	0.6329				
	800	0.0	0.31		1618	5159.812	0.6862				
	815	0.0400	0.32		1634	5033.930	0.7282				
	830	0.0400	0.33		1646	4925.016	0.7590				
	845	0.0407	0.34		1658	4729.496	0.7888				
	900	0.2800	0.41		1714	4455.711	0.8266				
	915	0.4000	0.51		1730	4178.289	0.8622				
	930	0.1600	0.55		1746	3726.040	0.8948				
	945	0.3200	0.63		1800	3389.997	0.9205				
	1000	1.2400	0.94		1814	3011.999	0.9436				
	1015	1.0400	1.20		1832	2609.996	0.9697				
	1030	0.5600	1.34		1848	2315.995	0.9900				
	1045	0.3600	1.43		1900	1961.995	1.0032				
	1100	0.3200	1.51		1918	1710.000	1.0202				
	1115	0.2000	1.56		1946	1343.999	1.0422				
	1130	0.2400	1.62		2032	954.000	1.0694				
	1145	0.2800	1.69		2100	800.000	1.0820				
	1200	0.1600	1.73		2120	695.297	1.0857				
	1215	0.2400	1.79		2148	600.000	1.0990				
	1230	0.2400	1.85		2156	575.000	1.1014				
	1245	0.2400	1.91		2216	519.520	1.1070				
	1300	0.4800	2.03		2234	474.259	1.1116				
	1315	0.5200	2.16		2302	426.152	1.1161				
	1330	0.4000	2.26		2322	391.437	1.1223				
	1345	0.4400	2.37		2340	372.895	1.1258				
	1400	0.3200	2.45		2400	341.955	1.1255				
	1415	0.2800	2.52	3- 4	12	335.895	1.1316				
	1430	0.2400	2.58		28	312.050	1.1343				
	1445	0.2000	2.63		42	315.000	1.1366				
	1500	0.0800	2.65		112	303.230	1.1414				
	1515	0.0800	2.67		136	303.230	1.1451				
	1530	0.0400	2.68		200	306.163	1.1489				
	1545	0.0400	2.69		228	286.000	1.1532				
	1600	0.0400	2.70		246	288.812	1.1559				
	1615	0.0	2.70		258	280.456	1.1577				
	1630	0.0	2.70		356	259.000	1.1658				
	1645	0.0008	2.70		536	222.504	1.1782				
	1700	0.0007	2.70		648	197.208	1.1860				
	1715	0.0007	2.70		758	175.963	1.1927				
					950	149.375	1.2021				
					1122	128.250	1.2067				
					1228	119.938	1.2129				
					1342	109.250	1.2173				
					1456	101.000	1.2213				
					1748	84.000	1.2295				
					2050	69.000	1.2367				
					2222	64.953	1.2399				
					2400	58.568	1.2430				
					2400	32.050	1.2766				
					3- 6	2400	27.408	1.2986			
					3- 7	2400	23.210	1.3174			

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.0000309. Thiessen weighted storm rainfall, rain gages 2, 4 thru 9, 13 thru 15, 17 thru 20, 22, 25, 28 thru 31 and 33. For 30-day antecedent P and Q, see tables on pp. 62.005 -1 and 2.



EVENT OF MARCH 2 - 7, 1970
OXFORD, MISSISSIPPI WATERSHED W-17

OXFORD, MISSISSIPPI WATERSHED W-24

LOCATION: Marshall Co., Miss.; 2.2 mi. SW of Holly Springs on County road; Little Sand Ditch, Pigeon Roost Creek Watershed, Yazoo River Basin.

AREA: 512.00 acres

MONTHLY PRECIPITATION AND RUNOFF (inches)										OXFORD, MISSISSIPPI				WATERSHED W-24					
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual					
1970	P	1.32	4.70	6.22	7.99	5.29	6.31	3.31	2.32	2.32	6.39	2.73	4.68	53.58					
	Q	0.094	0.568	1.975	3.382	1.324	0.690	0.039	0.0	0.0	0.167	0.015	0.564	8.817					
STA AV	P	3.74	4.83	4.94	5.06	4.36	3.13	3.98	3.76	4.16	2.52	4.30	5.28	50.05					
	Q	1.085	1.465	1.407	1.435	0.634	0.144	0.194	0.314	0.241	0.134	0.535	1.091	8.679					
ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																			
		Maximum Discharge		1 Hour		2 Hours		Maximum Volume for Selected Time Interval				12 Hours		1 Day		2 Days		8 Days	
		Date	Rate	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.
1970		4-17	0.597	4-17	0.474	4-17	0.709	4-17	1.052	4-17	1.191	4-17	1.280	4-17	1.383	4-17	2.117		
MAXIMUMS FOR PERIOD OF RECORD																			
		2-23	1.040	2-23	0.900	2-23	1.360	2-23	1.640	2-23	1.860	3-28	2.390	1-30	3.160	3-24	5.320		
		1962		1962		1962		1962		1962		1965		1957		1965			

NOTES: Watershed conditions: About 4% in cultivation (corn), fair cover November to March, poor cover April and May improving to good by mid-July; 13% in pasture and idle land, good cover April to October with fair cover remainder of year; 81% in woods, good cover; 1% in bare gullies; 1% clay pit. Percentages of total area in various land use categories are based on the latest survey completed in 1970. About 7% of drainage area above small desilting and retention dams. For map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1956-59, USDA Misc. Pub. 945, p. 62.7-4. Monthly precipitation Thiessen weighted from rain gages 4 and 30. Precipitation and runoff records began Jan. 1957. For long-time precipitation records, see National Weather Service records at Holly Springs, 4N, Mississippi.

1970 DAILY PRECIPITATION (inches)													OXFORD, MISSISSIPPI WATERSHED W-24	
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
1	0.0	1.23	0.11	1.93	0.26	0.71	0.0	0.0	0.0	0.0	0.0	0.0		
2	0.0	0.0	0.21	0.0	0.15	0.82	0.0	0.0	0.0	0.0	0.0	0.0		
3	0.0	0.0	2.32	0.0	0.0	0.0	0.0	0.13	0.26	0.0	0.0	0.0		
4	0.0	0.0	0.0	0.0	0.0	0.25	0.0	0.30	0.04	0.0	0.0	0.0		
5	0.0	0.06	0.0	0.0	0.0	0.03	0.0	0.44	0.0	0.0	0.0	0.0		
6	0.11	0.05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.06	0.0	0.0		
8	0.0	0.19	0.0	0.0	0.0	0.0	1.65	0.0	0.0	0.0	0.0	0.0		
9	0.0	0.0	0.0	0.0	0.14	0.0	0.0	0.22	0.0	0.99	1.16	0.0		
10	0.04	0.0	0.0	0.0	2.87	0.0	0.0	0.0	1.04	0.0	0.0	0.0		
11	0.62	0.0	0.17	0.0	0.14	0.0	0.0	0.0	0.0	0.06	0.0	0.40		
12	0.0	0.0	0.40	0.48	0.0	0.0	0.0	0.0	0.0	0.59	0.05	0.0		
13	0.0	0.0	0.0	0.01	0.0	0.96	0.0	0.0	0.0	2.33	0.31	0.0		
14	0.0	1.07	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.52	0.0		
15	0.0	1.51	0.0	0.0	0.0	2.27	0.0	0.0	0.0	0.0	0.0	0.67		
16	0.0	0.0	0.0	0.04	0.68	0.0	0.0	0.0	0.0	0.0	0.0	0.18		
17	0.0	0.0	0.85	2.84	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.33	0.0		
19	0.02	0.0	0.87	1.02	0.0	0.0	0.0	0.0	0.0	0.18	0.37	0.20		
20	0.0	0.0	0.05	0.0	0.0	0.03	1.30	0.10	0.0	0.04	0.0	2.09		
21	0.0	0.0	0.55	0.0	0.0	0.04	0.0	0.66	0.0	0.0	0.0	0.0		
22	0.0	0.03	0.0	0.0	0.0	0.0	0.28	0.19	0.0	0.0	0.0	0.33		
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.28	0.58	0.0	0.0	0.28		
24	0.0	0.09	0.04	0.67	0.0	1.15	0.0	0.0	0.0	0.75	0.0	0.0		
25	0.0	0.38	0.56	0.65	0.05	0.0	0.08	0.0	0.0	0.0	0.0	0.0		
26	0.0	0.0	0.0	0.33	0.0	0.05	0.0	0.0	0.39	0.0	0.0	0.0		
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
28	0.0	0.07	0.10	0.0	0.0	0.0	0.0	0.0	0.0	0.40	0.0	0.0		
29	0.53	0.0	0.0	0.0	0.64	0.0	0.0	0.0	0.0	0.0	0.0	0.04		
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.36		
31	0.0	0.0	0.0	0.36	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.08		
TOTAL	1.32	4.70	6.22	7.99	5.29	6.31	3.31	2.32	2.32	6.39	2.73	4.68		
STA AV	3.74	4.83	4.94	5.06	4.36	3.13	3.98	3.76	4.16	2.52	4.30	5.28		

NOTES: For daily air temperatures in the vicinity, see table for Watershed W-4C (p.62.001-1). Daily precipitation values Thiessen weighted from rain gages 4 and 30. STA AV based on 14 yr (1957-70) record period.

1970 MEAN DAILY DISCHARGE (cfs) OXFORD, MISSISSIPPI WATERSHED W-24												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.231	3.071	0.0	13.854	0.114	0.229	0.0	0.0	0.0	0.0	0.0	0.0
2	0.311	0.219	0.0	2.924	0.097	2.125	0.0	0.0	0.0	0.0	0.0	0.0
3	0.283	0.131	19.216	0.951	0.083	0.546	0.0	0.0	0.0	0.0	0.0	0.0
4	0.175	0.131	3.635	0.429	0.034	0.121	0.0	0.0	0.0	0.0	0.0	0.0
5	0.175	0.065	1.619	0.231	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6	0.175	0.0	1.092	0.115	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7	0.175	0.0	1.007	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8	0.087	0.0	0.923	0.0	0.0	0.0	0.552	0.0	0.0	0.0	0.0	0.0
9	0.0	0.0	0.711	0.0	0.0	0.0	0.0	0.0	0.0	0.287	3.292	0.0
10	0.0	0.0	0.445	0.0	17.348	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11	0.0	0.0	0.391	0.0	5.976	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	0.0	0.0	0.391	0.0 T	1.500	0.0	0.0	0.0	0.0	0.139	0.0	0.0
13	0.0	0.0	0.311	0.049	1.007	0.356	0.0	0.0	0.0	3.078	0.0	0.0
14	0.0	1.451	0.311	0.0	0.923	11.122	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	6.466	0.391	0.0	0.657	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.387	0.261	0.0	0.593	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.153	2.237	27.363	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	0.0	0.100	0.958	2.322	0.065	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	0.0	0.034	5.290	8.911	0.065	0.0	0.0	0.0	0.0	0.0	0.020	0.0
20	0.0	0.0	0.853	2.772	0.0	0.0	0.287	0.0	0.0	0.0	0.003	8.396
21	0.0	0.0	0.910	0.951	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.647
22	0.0	0.0	0.348	0.627	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.553
23	0.0	0.0	0.069	0.464	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.179
24	0.0	0.0	0.034	2.335	0.0	0.174	0.0	0.0	0.0	0.085	0.0	0.298
25	0.0	0.0	0.451	3.847	0.0	0.114	0.0	0.0	0.0	0.0	0.0	0.048
26	0.0	0.0	0.322	2.519	0.0	0.048	0.0	0.0	0.0	0.0	0.0	0.0
27	0.0	0.0	0.164	0.887	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	0.0	0.0	0.097	0.500	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	0.217	0.048	0.048	0.445	0.005	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	0.131	0.0	0.0	0.261	0.022	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	0.065	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MEAN	0.0654	0.4360	1.3705	2.4253	0.9191	0.4945	0.0271	0.0	0.0	0.1158	0.0105	0.3910
INCHES	0.094	0.568	1.975	3.382	1.324	0.690	0.039	0.0	0.0	0.167	0.015	0.564
STA AV	1.085	1.465	1.407	1.435	0.634	0.144	0.194	0.314	0.241	0.134	0.535	1.091

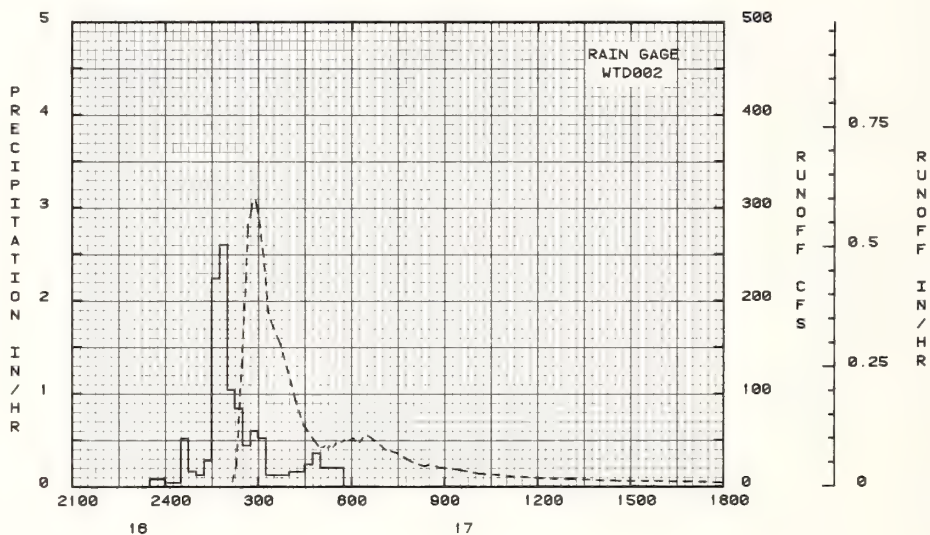
NOTES: To convert discharge in CFS to IN/DAY, multiply by 0.046488. Quality of records: Poor, estimated to be within 20% of actual. STA AV based on 14 yr (1957-70) record period.

1970			SELECTED RUNOFF EVENT				OXFORD, MISSISSIPPI				WATERSHED W-24	
ANTECEDENT CONDITIONS			RAINFALL				RUNOFF					
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.		
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)		
EVENT OF APRIL 16 - 19, 1970												
RG WTD002			RG WTD002									
4-16	0.0		4-16	2330	0.0	0.0	4-17	210	4.979	0.0		
4-17		0.000		2345	0.0800	0.02		218	22.936	0.0036		
				2400	0.0800	0.04		228	130.000	0.0283		
			4-17	15	0.0400	0.05		236	222.800	0.0738		
				30	0.0400	0.06		240	282.256	0.1064		
WATERSHED CONDITIONS:												
About 4% of area in cultivation primarily cotton,												
poor to fair cover; 13% in pasture and idle land, fair												
to good cover; 81% in woods, good cover; 1% in bare gullies; 1% clay pit.												
				45	0.5200	0.19		244	290.391	0.1434		
				100	0.1600	0.23		248	304.800	0.1818		
				115	0.1200	0.26		254	308.000	0.2412		
				130	0.2800	0.33		300	293.600	0.2995		
				145	2.2400	0.89		310	246.600	0.3866		
				200	2.6000	1.54		320	185.875	0.4564		
				215	1.0400	1.80		330	169.200	0.5137		
				230	0.8400	2.01		344	151.104	0.5860		
				245	0.4399	2.12		358	121.984	0.6477		
				300	0.6000	2.27		414	88.736	0.7021		
				315	0.5200	2.40		428	65.326	0.7369		
				330	0.1200	2.43		444	52.500	0.7673		
				345	0.1200	2.46		456	43.336	0.7859		
				400	0.1200	2.49		504	42.000	0.7969		
				415	0.1600	2.53		508	43.336	0.8024		
				430	0.1600	2.57		514	41.359	0.8106		
				445	0.2400	2.63		518	43.336	0.8161		
				500	0.3600	2.72		524	42.000	0.8244		
				515	0.2000	2.77		530	46.152	0.8329		
				530	0.2000	2.82		540	47.584	0.8480		
				545	0.2000	2.87		546	49.700	0.8574		
								554	49.000	0.8701		
								558	50.400	0.8765		
								604	51.800	0.8864		
								608	48.295	0.8929		
								616	47.584	0.9053		
								622	52.500	0.9150		
								632	54.600	0.9323		
								644	49.000	0.9524		
								658	43.336	0.9733		

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.001937. Thiessen weighted storm rainfall, rain gages 4 and 30. For 30-day antecedent P and Q, see tables on pp. 62.007-1 and 2.

1970			SELECTED RUNOFF EVENT			OXFORD, MISSISSIPPI			WATERSHED W-24		
ANTECEDENT CONDITIONS			RAINFALL			RUNOFF					
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.	
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)	
EVENT OF APRIL 16 - 19, 1970 (CONTINUED)											
							4-17	706	38.938	0.9839	
								718	37.184	0.9986	
								730	35.400	1.0127	
								748	28.784	1.0313	
								758	25.726	1.0401	
								822	21.438	1.0584	
								830	23.459	1.0642	
								850	19.984	1.0782	
								930	17.481	1.1024	
								1006	13.533	1.1204	
								1114	10.438	1.1467	
								1212	8.374	1.1643	
								1314	7.193	1.1799	
								1428	5.700	1.1953	
								1646	4.979	1.2191	
								2004	3.590	1.2465	
								2400	2.961	1.2715	
							4-18	2400	1.683	1.3794	
							4-19	858	1.472	1.4068	

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.001937. Thiessen weighted storm rainfall, rain gages 4 and 30. For 30-day antecedent P and Q, see tables on pp. 62-007-1 and 2.



EVENT OF APRIL 16 - 19, 1970

OXFORD, MISSISSIPPI WATERSHED W-24

OXFORD, MISSISSIPPI WATERSHED W-28

LOCATION: Marshall Co., Miss.; 2.3 mi. SW of Holly Springs on State Highway No. 7; Walkers Bottom Creek, Pigeon Roost Creek Watershed, Yazoo River Basin.

AREA: 1080.00 acres 1.69 sq. miles

MONTHLY PRECIPITATION AND RUNOFF (inches)														OXFORD, MISSISSIPPI WATERSHED W-28	
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual	
1970	P	1.32	4.02	6.13	7.40	4.83	5.36	3.03	5.00	2.71	6.45	2.77	3.94	52.96	
	Q	0.141	0.380	1.565	0.781	0.086	0.261	0.013	0.297	0.012	0.185	0.0	0.079	3.799	
STA AV	P	3.67	4.70	4.80	4.89	4.14	3.29	3.88	3.76	4.44	2.66	4.30	5.28	49.81	
	Q	0.345	0.521	0.521	0.373	0.168	0.060	0.116	0.229	0.202	0.097	0.201	0.405	3.238	
ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS															
		Maximum Discharge		1 Hour		2 Hours		Maximum Volume for Selected Time Interval		6 Hours		12 Hours		1 Day	
		Date	Date	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.
1970		8-20	0.302	8-20	0.202	8-20	0.244	3-3	0.442	3-3	0.570	3-3	0.640	3-3	0.733
MAXIMUMS FOR PERIOD OF RECORD															
		8-2	0.630	8-2	0.570	8-2	0.900	8-2	1.220	8-2	1.390	1-31	1.450	1-30	2.020
		1967		1967		1967		1967		1967		1957		1957	

NOTES: Watershed conditions: About 9% in cultivation (cotton, soybeans and corn), fair cover November to March, poor cover April and May improving to good by mid-July; 28% in pasture and idle land, good cover April to October with fair cover remainder of year; 61% in woods, good cover; 2% in bare gullies. Percentages of total area in various land use categories are based on the latest survey completed in 1970. About 58% of drainage area above small desilting and retention dams. For map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1956-59, USDA Misc. Pub. 945, p. 62.8-5. Monthly precipitation Thiessen weighted from rain gages 5, 6 and 7. Precipitation and runoff records began Jan. 1957. For long-time precipitation records, see National Weather Service records at Holly Springs, 4N, Mississippi.

1970 DAILY PRECIPITATION (inches)														OXFORD, MISSISSIPPI WATERSHED W-28	
	Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
	1	0.0	1.24	0.18	1.31	0.16	0.78	0.0	0.17	0.0	0.0	0.0	0.0		
	2	0.0	0.0	0.26	0.0	0.09	0.80	0.0	0.01	0.0	0.0	0.0	0.0		
	3	0.0	0.0	2.18	0.0	0.0	0.0	0.0	0.73	0.48	0.0	0.0	0.0		
	4	0.0	0.0	0.0	0.0	0.0	0.20	0.0	0.15	0.12	0.0	0.0	0.0		
	5	0.0	0.07	0.0	0.0	0.0	0.04	0.0	0.22	0.0	0.0	0.0	0.0		0.03
	6	0.05	0.05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
	7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.00	0.0	0.0		0.0
	8	0.0	0.23	0.0	0.0	0.0	0.0	1.52	0.0	0.0	0.0	0.0	0.0		0.0
	9	0.0	0.0	0.0	0.0	0.16	0.0	0.0	0.20	0.0	0.79	1.21	0.0		0.0
	10	0.0	0.0	0.0	0.0	2.23	0.0	0.0	0.0	1.14	0.0	0.0	0.0		0.0
	11	0.71	0.0	0.23	0.0	0.11	0.0	0.0	0.0	0.0	0.15	0.0	0.58		0.0
	12	0.0	0.0	0.29	0.63	0.0	0.0	0.0	0.0	0.0	0.66	0.07	0.0		0.0
	13	0.0	0.0	0.0	0.04	0.0	1.26	0.0	0.0	0.0	2.52	0.31	0.0		0.0
	14	0.0	0.57	0.0	0.0	0.0	0.0	0.0	0.02	0.0	0.0	0.49	0.0		0.0
	15	0.0	1.29	0.0	0.0	0.0	2.14	0.0	0.0	0.0	0.0	0.0	0.66		0.0
	16	0.0	0.0	0.0	0.06	0.75	0.0	0.0	0.26	0.0	0.0	0.0	0.28		0.0
	17	0.0	0.0	0.87	2.47	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
	18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.29	0.0		0.0
	19	0.01	0.0	1.06	1.20	0.0	0.0	0.0	0.0	0.0	0.22	0.40	0.20		0.0
	20	0.0	0.0	0.05	0.0	0.0	0.0	1.00	2.21	0.0	0.01	0.0	1.40		0.0
	21	0.0	0.0	0.49	0.0	0.0	0.0	0.0	0.02	0.0	0.0	0.0	0.0		0.0
	22	0.0	0.03	0.0	0.0	0.0	0.0	0.39	0.88	0.0	0.0	0.0	0.14		0.0
	23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.12	0.73	0.0	0.0	0.21		0.0
	24	0.0	0.09	0.02	0.75	0.02	0.13	0.0	0.0	0.0	0.68	0.0	0.0		0.0
	25	0.0	0.39	0.43	0.57	0.05	0.0	0.12	0.0	0.0	0.0	0.0	0.0		0.0
	26	0.0	0.0	0.0	0.37	0.0	0.0	0.0	0.0	0.24	0.0	0.0	0.0		0.0
	27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
	28	0.0	0.06	0.08	0.0	0.0	0.0	0.0	0.0	0.0	0.42	0.0	0.0		0.0
	29	0.55	0.0	0.0	0.0	0.75	0.0	0.0	0.0	0.0	0.0	0.0	0.04		0.0
	30	0.0	0.0	0.0	0.0	0.08	0.0	0.0	0.0	0.0	0.0	0.0	0.33		0.0
	31	0.0	0.0	0.0	0.43	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.07		0.0
TOTAL		1.32	4.02	6.13	7.40	4.83	5.36	3.03	5.00	2.71	6.45	2.77	3.94		
STA AV		3.67	4.70	4.80	4.89	4.14	3.29	3.88	3.76	4.44	2.66	4.30	5.28		

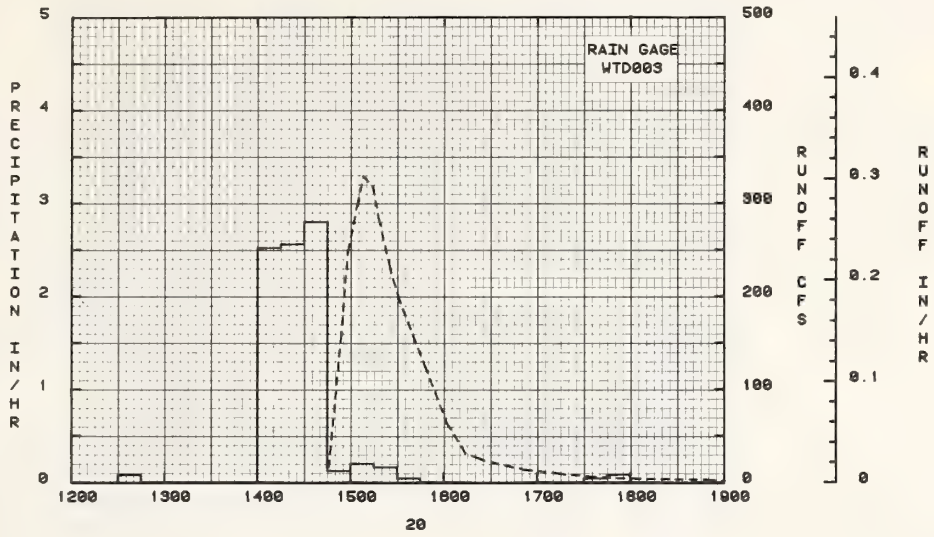
NOTES: For daily air temperatures in the vicinity, see table for Watershed W-4C (p.62.001-1). Daily precipitation values Thiessen weighted from rain gages 5, 6 and 7. STA AV based on 14 yr (1957-70) record period.

1970 MEAN DAILY DISCHARGE (cfs) OXFORD, MISSISSIPPI WATERSHED W-28												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.838	3.352	0.240	2.589	0.0	0.053	0.0	0.0	0.0	0.0	0.0	0.0
2	0.737	1.325	0.120	4.031	0.0	0.371	0.0	0.0	0.0	0.0	0.0	0.0
3	0.597	0.006	26.761	2.204	0.0	0.005	0.0	0.0	0.0	0.0	0.0	0.0
4	0.460	0.0	5.650	0.665	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	0.394	0.0	2.222	0.363	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6	0.394	0.0	1.840	0.239	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7	0.363	0.0	1.511	0.177	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8	0.363	0.039	1.300	0.194	0.0	0.0	0.268	0.0	0.0	0.0	0.0	0.0
9	0.363	0.0	1.210	0.149	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10	0.363	0.0	1.120	0.132	3.121	0.0	0.0	0.0	0.567	0.0	0.0	0.0
11	0.363	0.0	0.979	0.057	0.579	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	0.363	0.0	0.902	0.095	0.057	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13	0.363	0.0	0.802	1.878	0.0	0.319	0.0	0.0	0.0	8.393	0.0	0.0
14	0.256	0.848	0.637	0.075	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.074	4.835	0.637	0.0	0.0	11.108	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	2.312	0.637	0.0	0.153	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.394	2.897	15.996	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	0.0	0.426	1.604	0.351	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	0.0	0.489	6.361	4.902	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	0.426	3.112	0.016	0.0	0.0	0.300	11.709	0.0	0.0	0.0	2.143
21	0.0	0.394	2.783	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.429
22	0.0	0.425	1.875	0.0	0.0	0.0	0.0	1.645	0.0	0.0	0.0	0.0
23	0.0	0.425	0.967	0.0	0.0	0.0	0.0	0.118	0.0	0.0	0.0	0.0
24	0.0	0.394	0.967	0.265	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.331	1.235	0.211	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	0.0	0.300	0.964	0.696	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	0.0	0.270	0.457	0.087	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	0.0	0.240	0.457	0.043	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	0.086		0.307	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	0.0		0.245	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	0.0		0.224	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MEAN	0.2058	0.6158	2.2911	1.1806	0.1261	0.3952	0.0183	0.4346	0.0189	0.2708	0.0	0.1152
INCHES	0.141	0.380	1.565	0.781	0.086	0.261	0.013	0.297	0.012	0.185	0.0	0.079
STA AV	0.345	0.521	0.521	0.373	0.168	0.060	0.116	0.229	0.202	0.097	0.201	0.405

NOTES: To convert discharge in CFS to IN/DAY, multiply by 0.0220387. Quality of records: Poor, estimated to be within 20% of actual. STA AV based on 14 yr (1957-70) record period.

1970			SELECTED RUNOFF EVENT				OXFORD, MISSISSIPPI				WATERSHED W-28	
ANTECEDENT CONDITIONS			RAINFALL				RUNOFF					
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.		
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)		
EVENT OF AUGUST 20, 1970												
RG WTD003			RG WTD003									
8-20	0.06	0.001	8-20	1230	0.0	0.0	8-20	1446	16.000	0.0		
				1245	0.0800	0.02		1454	162.000	0.0109		
				1300	0.0	0.02		1458	248.700	0.0234		
				1315	0.0	0.02		1504	298.000	0.0489		
				1330	0.0	0.02		1508	328.905	0.0680		
WATERSHED CONDITIONS: About 9% of area in cultivation, primarily cotton, soybeans and corn, poor to fair cover; 28% in pasture and idle land, fair to good cover; 61% in woods, good cover; 2% in bare gullies.				1345	0.0	0.02		1514	316.876	0.0970		
				1400	0.0	0.02		1518	282.698	0.1153		
				1415	2.5200	0.65		1526	224.900	0.1463		
				1430	2.5600	1.29		1532	192.603	0.1658		
				1445	2.8000	1.99		1548	124.600	0.2045		
				1500	0.1200	2.02		1602	63.144	0.2247		
				1515	0.2000	2.07		1614	30.808	0.2333		
				1530	0.1600	2.11		1626	23.098	0.2382		
				1545	0.0400	2.12		1640	17.630	0.2426		
				1730	0.0	2.12		1652	13.120	0.2454		
				1745	0.0400	2.13		1718	8.234	0.2497		
				1800	0.0800	2.15		1738	5.070	0.2518		
								1802	3.442	0.2534		
								1850	2.213	0.2555		
								1948	1.120	0.2570		
							2048	0.425	0.2577			
							2132	0.115	0.2579			

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.0009183. Thiessen weighted storm rainfall, rain gages 5, 6 and 7. For 30-day antecedent P and Q, see table above and on previous page.



EVENT OF AUGUST 20, 1970
OXFORD, MISSISSIPPI WATERSHED W-28

OXFORD, MISSISSIPPI WATERSHED W-32

LOCATION: Marshall Co., Miss.; 4.6 mi. E of Walhill on County road; Cuffawa Creek, Pigeon Roost Creek Watershed, Yazoo River Basin.

AREA: 20000.00 acres 31.30 sq. miles

MONTHLY PRECIPITATION AND RUNOFF (inches)														OXFORD, MISSISSIPPI				WATERSHED W-32			
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual							
1970	P	1.21	4.17	6.78	7.08	6.56	4.69	3.34	3.12	2.07	6.78	2.66	3.31	51.77							
	Q	0.012	0.935	2.808	2.541	2.085	1.001	0.093	0.127	0.601	0.330	0.023	0.186	10.142							
STA AV	P	3.77	4.82	4.99	5.11	4.68	3.11	3.95	3.68	4.59	2.56	4.42	5.40	51.08							
	Q	1.141	1.683	1.853	1.444	1.045	0.201	0.337	0.354	0.472	0.142	0.692	1.477	10.843							
ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																					
		Maximum Discharge		1 Hour		2 Hours		Maximum Volume for Selected Time Interval				2 Days		8 Days							
		Date	Date	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.						
1970		3- 3	0.337	3- 3	0.332	3- 3	0.640	3- 3	1.611	3- 3	1.980	3- 3	2.040	3- 3	2.078	2-27 2.097					
MAXIMUMS FOR PERIOD OF RECORD																					
		2-23	0.570	2-23	0.560	7- 9	0.960	12- 3	1.940	12- 3	2.450	12- 3	3.480	12- 3	3.720	3-24 6.130					
		1962		1962		1967		1964		1964		1964		1964		1965					

NOTES: Watershed conditions: About 28% in cultivation (cotton, corn, soybeans and ryegrass), fair cover November to March, poor cover April and May improving to good by mid-July; 32% in pasture and idle land, good cover April to October with fair cover remainder of year; 39% in woods, good cover; 1% in bare gullies. Percentages of total area in various land use categories are based on surveys made from 1967 to 1972. About 21% of drainage area above small desilting and retention dams. For map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1956-59, USDA Misc. Pub. 945, p. 62.10-5. Monthly precipitation Thiessen weighted from 10 rain gages. Precipitation and runoff records began Jan. 1957. For long-time precipitation records, see National Weather Service records at Holly Springs, 4N, Mississippi.

1970 DAILY PRECIPITATION (inches)														OXFORD, MISSISSIPPI WATERSHED W-32	
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec			
1	0.0	1.25	0.23	1.42	0.47	1.63	0.0	0.10	0.0	0.0	0.0	0.0			
2	0.0	0.0	0.26	0.0	0.15	1.10	0.0	0.45	0.0	0.0	0.00	0.0			
3	0.0	0.0	2.68	0.0	0.0	0.0	0.16	0.01	0.29	0.0	0.0	0.0			
4	0.0	0.0	0.0	0.0	0.0	0.10	0.00	0.0	0.20	0.0	0.0	0.0			
5	0.0	0.15	0.0	0.0	0.0	0.19	0.0	0.81	0.0	0.0	0.0	0.00			
6	0.05	0.10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.99	0.0	0.0			
8	0.0	0.30	0.0	0.0	0.0	0.0	1.95	0.41	0.0	0.0	0.0	0.0			
9	0.0	0.0	0.0	0.0	0.11	0.0	0.0	0.35	0.0	0.98	1.17	0.0			
10	0.00	0.0	0.0	0.0	3.70	0.0	0.0	0.01	1.01	0.0	0.0	0.0			
11	0.64	0.0	0.15	0.0	0.04	0.0	0.0	0.0	0.0	0.05	0.0	0.40			
12	0.0	0.0	0.36	0.59	0.0	0.0	0.0	0.0	0.0	0.65	0.11	0.0			
13	0.0	0.0	0.0	0.01	0.0	0.17	0.0	0.0	0.06	2.48	0.33	0.0			
14	0.0	0.22	0.0	0.0	0.0	0.02	0.0	0.0	0.0	0.0	0.42	0.0			
15	0.0	1.45	0.0	0.0	0.0	1.33	0.01	0.0	0.0	0.0	0.0	0.75			
16	0.0	0.0	0.0	0.09	0.70	0.0	0.0	0.01	0.0	0.0	0.0	0.18			
17	0.0	0.0	0.83	2.11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.0	0.33	0.0			
19	0.02	0.0	1.10	1.31	0.0	0.0	0.0	0.01	0.00	0.28	0.30	0.18			
20	0.0	0.0	0.05	0.0	0.0	0.0	0.62	0.08	0.0	0.01	0.0	1.20			
21	0.0	0.0	0.51	0.0	0.0	0.05	0.0	0.22	0.0	0.0	0.0	0.0			
22	0.0	0.05	0.0	0.0	0.0	0.0	0.55	0.58	0.0	0.0	0.0	0.04			
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.18	0.0	0.0	0.10			
24	0.0	0.14	0.03	0.59	0.0	0.10	0.0	0.0	0.0	0.87	0.0	0.0			
25	0.0	0.42	0.51	0.58	0.06	0.0	0.05	0.0	0.0	0.0	0.0	0.0			
26	0.0	0.0	0.0	0.38	0.0	0.00	0.0	0.0	0.34	0.0	0.0	0.0			
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
28	0.0	0.08	0.07	0.0	0.0	0.0	0.0	0.0	0.0	0.46	0.0	0.0			
29	0.50	0.0	0.0	0.0	0.91	0.0	0.0	0.0	0.0	0.0	0.0	0.02			
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.07	0.0	0.0	0.0	0.36			
31	0.0	0.0	0.0		0.42		0.0	0.0		0.0		0.08			
TOTAL	1.21	4.17	6.78	7.08	6.56	4.69	3.34	3.12	2.07	6.78	2.66	3.31			
STA AV	3.77	4.82	4.99	5.11	4.68	3.11	3.95	3.68	4.59	2.56	4.42	5.40			

NOTES: For daily air temperatures in the vicinity, see table for Watershed W-4C (p.62.001-1). Daily precipitation values Thiessen weighted from rain gages 3, 10 thru 14, 20, 21, 24 and 26. STA AV based on 14 yr (1957-70) record period.

1970 MEAN DAILY DISCHARGE (cfs) OXFORD, MISSISSIPPI WATERSHED W-32												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.2	207.7	0.4	329.2	5.7	67.5	0.0	0.0	0.0	0.0	0.0	0.0
2	0.1	35.5	0.9	106.6	2.9	545.2	0.0	1.0	0.0	0.0	0.0	0.0
3	0.0	8.4	1682.0	8.7	1.6	42.6	0.0	3.3	0.0	0.0	0.0	0.0
4	0.0	1.9	64.2	0.5	0.4	11.9	0.0	0.5	0.0	0.0	0.0	0.0
5	0.0	0.8	13.1	0.2	0.1	5.2	0.0	23.3	0.0	0.0	0.0	0.0
6	0.0	1.1	5.3	0.1	0.2	10.2	0.0	6.5	0.0	0.0	0.0	0.0
7	0.0	0.9	3.0	0.1	0.1	0.1	0.0	0.9	0.0	0.0	0.0	0.0
8	0.0	0.9	1.5	0.1	0.0	0.0	75.7	41.9	0.0	0.0	0.0	0.0
9	0.0	1.0	0.5	0.0	0.1	0.0	2.3	7.3	0.0	0.4	9.8	0.0
10	0.0	0.9	0.2	0.0	1064.1	0.0	0.2	1.7	0.6	0.5	2.0	0.0
11	7.4	0.9	0.3	0.0	627.0	0.0	0.1	0.5	0.5	0.3	0.4	0.2
12	1.7	0.8	3.3	0.4	23.2	0.0	0.0	0.1	0.0	0.3	0.1	0.7
13	0.0	0.8	1.7	11.0	3.4	0.0	0.0	0.0	0.0	265.7	0.0	0.4
14	0.0	5.6	0.3	0.4	0.9	0.0	0.0	0.0	0.0	2.1	1.4	0.3
15	0.0	437.6	0.2	0.3	0.2	157.8	0.0	0.0	0.0	1.1	0.5	1.1
16	0.0	62.3	0.2	0.1	0.0	0.3	0.0	0.0	0.0	0.1	0.2	1.9
17	0.0	11.2	33.1	825.4	0.0	0.0	0.0	0.0	0.0	0.0	0.1	1.4
18	0.0	2.9	0.3	17.5	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.8
19	0.0	1.1	395.1	600.1	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.5
20	0.0	0.3	43.1	45.2	0.0	0.0	0.0	0.0	0.0	0.0	2.2	15.9
21	0.0	0.4	57.9	10.1	0.0	0.0	0.0	7.4	0.0	0.0	0.8	107.7
22	0.0	0.4	15.3	1.4	0.0	0.0	0.0	7.0	0.0	0.0	0.4	8.1
23	0.0	0.4	0.9	0.4	0.0	0.0	0.0	4.9	0.0	0.0	0.1	6.7
24	0.0	0.3	0.0	16.9	0.0	0.0	0.0	0.3	0.0	2.4	0.0	4.9
25	0.0	0.3	7.7	32.9	0.0	0.0	0.0	0.0	0.0	2.2	0.0	2.3
26	0.0	0.4	28.8	117.0	0.0	0.0	0.0	0.0	0.0	0.9	0.0	0.9
27	0.0	0.3	0.4	8.8	0.0	0.0	0.0	0.0	0.0	0.5	0.0	0.6
28	0.0	0.4	0.0	1.4	0.0	0.0	0.0	0.0	0.0	0.4	0.0	0.4
29	1.0	0.0	0.0	0.4	9.6	0.0	0.0	0.0	0.0	0.3	0.0	0.2
30	0.0	0.0	0.0	0.2	8.2	0.0	0.0	0.0	0.0	0.1	0.0	0.4
31	0.0	0.0	0.0	0.0	4.2	0.0	0.0	0.0	0.0	0.0	0.0	0.7
MEAN	0.335	28.057	76.125	71.169	56.509	28.031	2.529	3.439	0.040	8.942	0.632	5.036
INCHES	0.012	0.935	2.808	2.541	2.085	1.001	0.093	0.127	0.001	0.330	0.023	0.186
STA AV	1.141	1.683	1.853	1.444	1.045	0.201	0.337	0.354	0.472	0.142	0.692	1.477

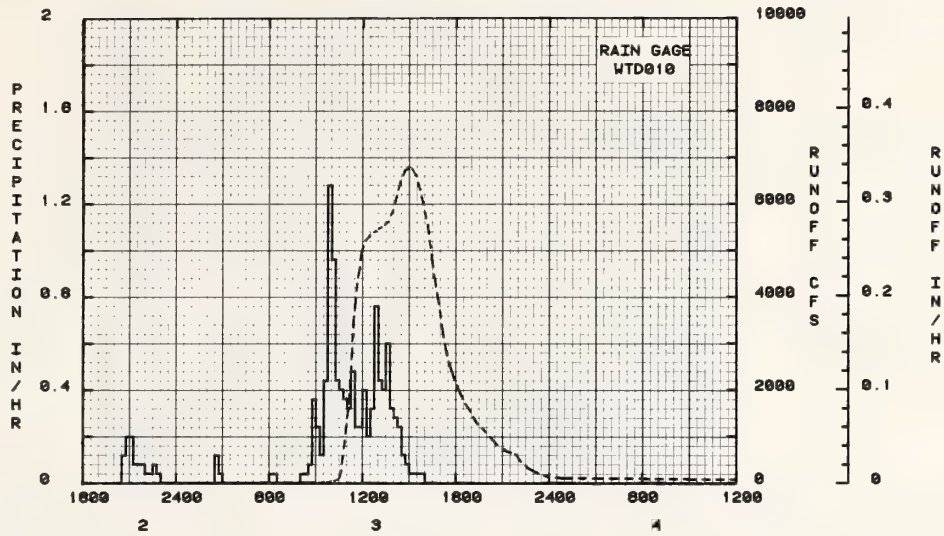
NOTES: To convert discharge in CFS to IN/DAY, multiply by 0.0011901. Quality of records: Good, estimated to be within 10% of actual. STA AV based on 14 yr (1957-70) record period.

1970 SELECTED RUNOFF EVENT OXFORD, MISSISSIPPI WATERSHED W-32												
ANTECEDENT CONDITIONS			RAINFALL				RUNOFF					
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.		
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)		
EVENT OF MARCH 2 - 9, 1970												
RG WTD010			RG WTD010									
3- 2	0.0	0.001	3- 2	2000	0.0	0.0	3- 2	2054	0.750	0.0		
				2015	0.0	0.0		2110	2.103	0.0		
				2030	0.0	0.0		2400	3.936	0.0004		
				2045	0.1200	0.03	3- 3	136	3.500	0.0007		
				2100	0.2000	0.08		206	5.478	0.0008		
WATERSHED CONDITIONS: About 28% of area in cultivation, primarily cotton, corn and soybeans, and rye-grass, poor to fair cover; 32% in pasture and idle land, fair to good cover; 39% in woods, good cover; 1% in bare gullies; 2% urban.				2115	0.2000	0.13		244	5.478	0.0010		
				2130	0.0800	0.15		308	7.227	0.0011		
				2145	0.0800	0.17		536	7.227	0.0020		
				2200	0.0800	0.19		558	7.824	0.0021		
				2215	0.0400	0.20		608	9.000	0.0022		
				2230	0.0400	0.21		620	10.763	0.0023		
				2245	0.0800	0.23		642	12.576	0.0025		
				2300	0.0400	0.24		728	11.969	0.0030		
				2315	0.0	0.24		812	11.969	0.0034		
				2330	0.0	0.24		856	13.184	0.0039		
			3- 3	2345	0.0001	0.24		914	14.398	0.0041		
				145	0.0	0.24		930	16.152	0.0043		
				200	0.0006	0.24		942	18.384	0.0045		
				215	0.0008	0.24		958	30.000	0.0048		
				230	0.0	0.24		1012	48.512	0.0053		
				245	0.1200	0.27		1026	78.490	0.0060		
				300	0.0400	0.28		1032	120.625	0.0065		
				315	0.0	0.28		1038	269.104	0.0075		
				330	0.0	0.28		1044	586.502	0.0096		
				345	0.0	0.28		1052	906.094	0.0145		
				400	0.0	0.28		1058	1264.372	0.0199		
				415	0.0	0.28		1110	1909.997	0.0356		
				430	0.0	0.28		1118	2749.999	0.0510		
				445	0.0	0.28		1124	3420.997	0.0663		
				500	0.0	0.28		1130	3834.999	0.0843		
				515	0.0	0.28		1138	4284.984	0.1111		
				530	0.0	0.28		1148	4644.984	0.1480		
				545	0.0	0.28		1154	4932.977	0.1718		
				600	0.0	0.28		1210	5220.977	0.2389		
				615	0.0400	0.29		1226	5319.984	0.3086		

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.0000496. Thiessen weighted storm rainfall, rain gages 3, 10 thru 14, 20, 21, 24 and 26. For 30-day antecedent P and Q, see tables on pp. 620.10-1 and 2.

1970	SELECTED RUNOFF EVENT					OXFORD, MISSISSIPPI		WATERSHED W-32		
ANTECEDENT CONDITIONS			RAINFALL			RUNOFF				
Date Mo-Day	Painfall (inches)	Runoff (itches)	Date Mo-Day	Time of Day	Intensity (in/hr)	Acc. (inches)	Date Mo-Day	Time of Day	Rate (cfs)	Acc. (inches)
EVENT OF			MARCH			2 - 9, 1970 (CONTINUED)				
3- 3	630	0.0400	0.30	3- 3	1242	5391.977	0.3795			
	645	0.0	0.30		1250	5419.016	0.4152			
	700	0.0	0.30		1300	5464.695	0.4602			
	715	0.0	0.30		1312	5499.984	0.5146			
	730	0.0003	0.30		1324	5548.449	0.5694			
	745	0.0006	0.30		1338	5619.984	0.6340			
	800	0.0	0.30		1348	5747.977	0.6809			
	815	0.0400	0.31		1356	5859.984	0.7193			
	830	0.0393	0.32		1410	6155.973	0.7888			
	845	0.0800	0.34		1426	6491.973	0.8724			
	900	0.3600	0.43		1442	6723.977	0.9598			
	915	0.2400	0.49		1500	6787.973	1.0603			
	930	0.1200	0.52		1510	6747.977	1.1162			
	945	0.4400	0.63		1526	6595.977	1.2044			
	1000	1.2800	0.95		1540	6299.984	1.2790			
	1015	0.9600	1.19		1554	5979.980	1.3501			
	1030	0.4400	1.30		1612	5499.984	1.4355			
	1045	0.4000	1.40		1628	4779.984	1.5035			
	1100	0.3600	1.49		1642	4230.977	1.5556			
	1115	0.3200	1.57		1654	3843.995	1.5956			
	1130	0.4800	1.69		1712	3132.997	1.6475			
	1145	0.2400	1.75		1726	2739.997	1.6814			
	1200	0.2400	1.81		1740	2459.999	1.7115			
	1215	0.4000	1.91		1754	2219.997	1.7386			
	1230	0.2000	1.96		1810	2009.997	1.7666			
	1245	0.3200	2.04		1826	1819.999	1.7919			
	1300	0.7600	2.23		1840	1659.837	1.8120			
	1315	0.4400	2.34		1856	1543.278	1.8332			
	1330	0.4000	2.44		1910	1381.997	1.8501			
	1345	0.6000	2.59		1924	1264.372	1.8654			
	1400	0.3200	2.67		1940	1172.239	1.8815			
	1415	0.2800	2.74		1954	1086.117	1.8946			
	1430	0.2400	2.80		2018	939.695	1.9107			
	1445	0.1200	2.83		2040	814.261	1.9306			
	1500	0.0800	2.85		2102	712.367	1.9445			
	1515	0.0401	2.86		2132	637.614	1.9612			
	1530	0.0401	2.87		2150	608.312	1.9705			
	1545	0.0400	2.88		2210	457.615	1.9793			
	1600	0.0400	2.89		2238	313.885	1.9882			
	1615	0.0	2.89		2318	195.469	1.9966			
	1630	0.0	2.89		2340	154.205	1.9998			
	1645	0.0	2.89		2400	120.625	2.0021			
				3- 4	46	103.176	2.0064			
					128	98.488	2.0099			
					300	93.912	2.0172			
					428	89.424	2.0239			
					558	85.000	2.0304			
					858	74.250	2.0422			
					1158	66.010	2.0526			
					1458	56.064	2.0617			
					1756	46.729	2.0693			
					2056	28.843	2.0749			
					2400	19.608	2.0786			
				3- 5	2400	6.632	2.0942			
				3- 6	2400	3.936	2.1005			
				3- 7	2400	2.103	2.1041			
				3- 8	2400	0.929	2.1059			
				3- 9	2400	0.166	2.1066			

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.0000496. Thiessen weighted storm rainfall, rain gages 3, 10 thru 14, 20, 21, 24 and 26. For 30-day antecedent P and Q, see tables on pp. 62010-1 and 2.



EVENT OF MARCH 2 - 9, 1970
 OXFORD, MISSISSIPPI WATERSHED W-32

AREA: 7550.00 acres 11.80 sq. miles

NOTES: Watershed conditions: About 31% in cultivation (cotton, corn, soybeans and ryegrass), fair cover November to March, poor cover April to May improving to good by mid-July; 31% in pasture and idle land; good cover April to October, very fair cover remainder; 37% in woods, good cover, 14 in bare gullies. Percentages of total area in various land use categories are based on the latest survey completed in 1971. About 22% of drainage area above small desilting and retention dams. For map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1956-59, USDA Misc. Pub. 945, p. 62-12-5. Monthly precipitation Thiessen weighted from 5 rain gages. Precipitation and runoff records began Jan. 1957. For long-time precipitation records, see National Weather Service records at Holly Springs, 4N, Mississippi.

NOTES: For daily air temperatures in the vicinity, see table for Watershed W-4C (p.62001-1). Daily precipitation values Thiessen weighted from rain gages 10, 11, 20, 21 and 24. SFA AV based on 14 yr (1957-70) record period.

62.012- 1

1970 MEAN DAILY DISCHARGE (cfs) OXFORD, MISSISSIPPI WATERSHED W-35												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.0	68.19	0.0	88.36	0.0	28.85	0.0	0.0	0.0	0.0	0.0	0.0
2	0.0	10.71	0.0	34.51	0.0	168.57	0.0	0.37	0.0	0.0	0.0	0.0
3	3.0	0.0	611.60	6.20	0.0	4.92	0.0	0.0	0.0	0.0	0.0	0.0
4	0.0	0.0	17.45	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	0.0	0.0	0.72	0.0	0.0	12.80	0.0	4.76	0.0	0.0	0.0	0.0
6	0.0	0.0	0.0	0.0	0.0	5.98	0.0	0.0	0.0	0.0	0.0	0.0
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8	0.0	0.0	0.0	0.0	0.0	0.0	13.02	10.88	0.0	0.0	0.0	0.0
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10	0.0	0.0	0.0	0.0	415.46	0.0	0.0	0.0	0.10	0.0	0.0	0.0
11	0.0	0.0	0.0	0.0	261.12	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	0.0	0.0	0.0	0.0	3.13	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	98.14	0.0	0.0
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	68.69	0.0	0.0	0.0	39.91	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	20.23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.07	12.57	222.93	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	0.0	0.0	1.62	3.64	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	0.0	0.0	167.32	212.78	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	0.0	15.17	11.97	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.74
21	0.0	0.0	0.0	38.74	0.26	0.0	0.0	0.0	0.0	0.0	0.0	37.59
22	0.0	0.0	0.0	9.01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	0.0	0.0	0.05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	0.0	0.0	0.0	4.71	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	3.92	9.76	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	0.0	0.0	7.03	49.20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	0.0	0.0	0.0	1.82	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	0.41	0.0	0.0	0.0	6.01	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	0.0	0.0	0.0	0.0	1.19	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	0.0	0.0	0.0	0.65	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MEAN	0.013	5.996	28.554	21.537	22.179	8.701	0.420	0.516	0.003	3.166	0.0	1.398
INCHES	0.001	0.529	2.791	2.037	2.168	0.823	0.041	0.050	0.000	0.309	0.0	0.137
STA AV	1.311	1.718	1.928	1.436	1.074	0.186	0.309	0.293	0.480	0.117	0.644	1.510

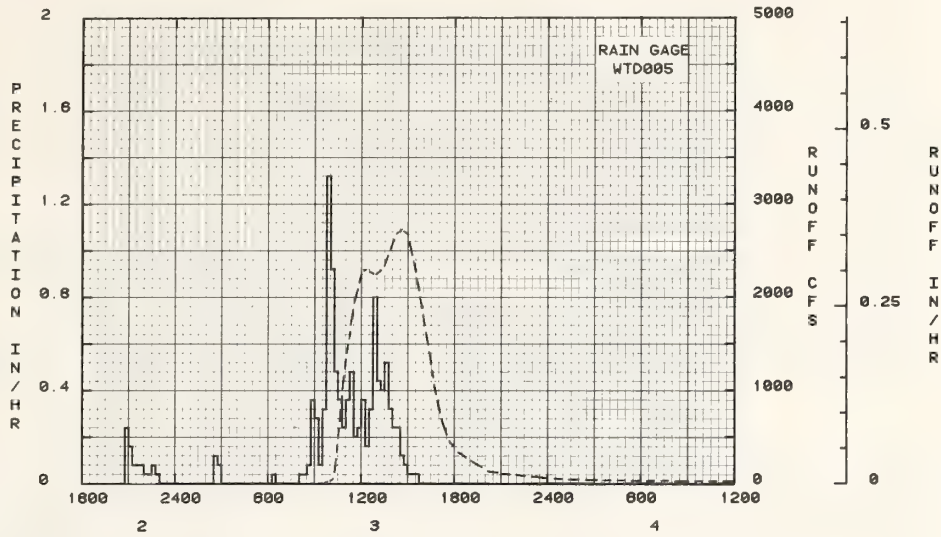
NOTES: To convert discharge in CFS to IN/DAY, multiply by 0.0031525. Quality of records: Fair, estimated to be within 15% of actual. STA AV based on 14 yr (1957-70) record period.

1970 SELECTED RUNOFF EVENT OXFORD, MISSISSIPPI WATERSHED W-35												
ANTECEDENT CONDITIONS			RAINFALL				RUNOFF					
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.		
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)		
EVENT OF MARCH 2 - 5, 1970												
RG WTD005			RG WTD005									
3- 2	0.03		3- 2	2045	0.0	0.0	3- 3	844	3.959	0.0		
3- 3		0.0		2100	0.2400	0.06		900	5.931	0.3002		
				2115	0.1600	0.10		916	6.518	0.0004		
				2130	0.0800	0.12		928	7.127	0.0006		
				2145	0.0797	0.14		940	13.850	0.0009		
WATERSHED CONDITIONS:				2200	0.0802	0.16		950	20.200	0.0013		
About 31% of area in culti-				2215	0.0400	0.17		1002	28.600	0.0019		
vation, primarily cotton,				2230	0.0400	0.18		1012	53.000	0.0028		
corn, soybeans and ryegrass,				2245	0.0800	0.20		1020	190.536	0.0049		
poor to fair cover; 31% in				2300	0.0400	0.21		1032	519.998	0.0142		
pasture and idle land, fair to				2315	0.0	0.21		1040	790.000	0.0257		
good cover; 37% in woods, good				2330	0.0	0.21		1050	1084.357	0.0462		
cover; 1% in bare gullies.				2345	0.0003	0.21		1100	1329.998	0.0726		
			3- 3	145	0.0	0.21		1116	1630.000	0.1244		
				200	0.0009	0.21		1120	1737.682	0.1391		
				215	0.0	0.21		1128	1864.157	0.1706		
				230	0.0	0.21		1138	2009.373	0.2130		
				245	0.1200	0.24		1152	2173.402	0.2771		
				300	0.0800	0.26		1200	2245.954	0.3159		
				315	0.0	0.26		1208	2287.357	0.3556		
				330	0.0	0.26		1216	2293.592	0.3957		
				345	0.0	0.26		1230	2275.278	0.4657		
				400	0.0	0.26		1244	2251.837	0.5350		
				415	0.0	0.26		1256	2245.954	0.5941		
				430	0.0	0.26		1314	2287.357	0.6834		
				445	0.0	0.26		1328	2334.375	0.7542		
				500	0.0	0.26		1342	2446.312	0.8275		
				515	0.0	0.26		1354	2540.000	0.8930		
				530	0.0	0.26		1406	2621.157	0.9608		
				545	0.0	0.26		1414	2680.000	1.0072		
				600	0.0	0.26		1434	2726.719	1.1256		
				615	0.0	0.26		1444	2704.958	1.1850		
				630	0.0400	0.27		1500	2663.157	1.2791		
				645	0.0005	0.27		1516	2452.319	1.3687		
				700	0.0005	0.27		1524	2341.517	1.4107		

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.0001314. Thiessen weighted storm rainfall, rain gages 10, 11, 20, 21 and 24. For 30-day antecedent P and Q, see tables on pp. 62012-1 and 2.

1970	SELECTED RUNOFF EVENT					OXFORD, MISSISSIPPI		WATERSHED W-35		
ANTECEDENT CONDITIONS			RAINFALL			RUNOFF				
Date Mo-Day	Rainfall (inches)	Runoff (inches)	Date Mo-Day	Time of Day	Intensity (in/hr)	Acc. (inches)	Date Mo-Day	Time of Day	Rate (cfs)	Acc. (inches)
EVENT OF MARCH 2 - 5, 1970 (CONTINUED)										
3- 3	715		0.0765	0.27	3- 3	1538	2145.625	1.4795		
	730		0.0005	0.27		1554	1878.479	1.5500		
	745		0.0005	0.27		1604	1695.999	1.5891		
	800		0.0005	0.27		1614	1557.999	1.6247		
	815		0.0400	0.28		1630	1281.999	1.6745		
	830		0.0400	0.29		1644	1026.875	1.7099		
	845		0.0800	0.31		1658	835.000	1.7384		
	900		0.3600	0.40		1714	649.999	1.7644		
	915		0.2800	0.47		1730	525.000	1.7850		
	930		0.0800	0.49		1744	436.360	1.7997		
	945		0.3200	0.57		1800	393.000	1.8142		
	1030		1.3200	0.90		1816	329.000	1.8268		
	1015		0.9200	1.13		1824	316.982	1.8325		
	1030		0.4800	1.25		1832	304.937	1.8379		
	1045		0.3600	1.34		1844	273.132	1.8455		
3- 4	1100		0.2400	1.40		1906	238.624	1.8578		
	1115		0.3600	1.49		1946	173.000	1.8758		
	1130		0.4806	1.61		2014	122.952	1.8849		
	1145		0.2000	1.66		2046	113.004	1.8932		
	1200		0.2400	1.72		2102	98.712	1.8969		
	1215		0.3600	1.81		2134	95.016	1.9037		
	1230		0.1600	1.85		2158	91.864	1.9086		
	1245		0.3201	1.93		2232	78.456	1.9149		
	1300		0.8000	2.13		2314	69.000	1.9217		
	1315		0.4400	2.24		2400	54.600	1.9279		
	1330		0.4000	2.34	3- 4	132	39.624	1.9374		
	1345		0.5200	2.47		310	32.938	1.9452		
	1400		0.3200	2.55		558	25.800	1.9560		
	1415		0.2400	2.61		902	20.200	1.9653		
	1430		0.2400	2.67		1202	17.400	1.9727		
	3- 5	1445		0.1200	2.70		1502	9.635	1.9780	
1500			0.0800	2.72		1632	6.518	1.9796		
1515			0.0399	2.73		1800	3.600	1.9806		
1530			0.0392	2.74		2102	2.850	1.9819		
1545			0.0400	2.75		2400	2.651	1.9830		
1600			0.0	2.75		616	1.006	1.9845		
1615			0.0	2.75		1216	0.475	1.9851		
1630			0.0	2.75						
1645			0.0	2.75						

NOTES: To convert runoff in CPS to IN/HR, multiply by 0.0001314. Thiessen weighted storm rainfall, rain gages 10, 11, 20, 21 and 24. For 30-day antecedent P and Q, see tables on pp. 62012-1 and 2.



EVENT OF MARCH 2 - 5, 1970
OXFORD, MISSISSIPPI WATERSHED W-35

OXFORD, MISSISSIPPI WATERSHED W-17A

LOCATION: Marshall Co., Miss.; 7.8 mi. SW of Holly Springs on County road; Pigeon Roost Creek Watershed, Yazoo River Basin.

AREA: 3200.00 acres 5.00 sq. miles

MONTHLY PRECIPITATION AND RUNOFF (inches)							OXFORD, MISSISSIPPI				WATERSHED W-17A					
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual			
1970	P	1.19	4.71	6.12	8.46	5.25	6.25	3.42	2.06	1.92	5.74	2.58	5.23	52.92		
	Q	0.183	0.664	2.447	3.240	1.255	0.899	0.036	0.0	0.0	0.012	0.004	0.489	9.228		
STA AV	P	3.39	4.46	4.91	5.30	3.99	2.78	4.32	4.55	4.06	2.33	3.63	5.41	49.14		
	Q	0.689	1.296	1.488	1.249	0.606	0.115	0.318	0.375	0.416	0.076	0.356	0.950	7.934		
ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																
	Maximum Discharge		1 Hour		2 Hours		Maximum Volume for Selected Time Interval									
	Date	Rate	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.		
1970	4-17	0.296	4-17	0.294	4-17	0.580	4-17	1.433	3- 3	1.894	3- 3	2.021	3- 3	2.080	4-17	2.426
MAXIMUMS FOR PERIOD OF RECORD																
	7- 9	0.490	7- 9	0.490	7- 9	0.960	7- 9	2.570	7- 9	3.510	7- 9	3.650	7- 9	3.660	4- 9	4.287
	1967		1967		1967		1967		1967		1967		1967		1969	

NOTES: Watershed conditions: About 14% of area in cultivation (cotton, soybeans and corn), fair cover November to March, poor cover April and May improving to good by mid-July; 17% in pasture and idle land, good cover April to October with fair cover remainder of year; 68% in woods, good cover; 1% in bare gullies. Percentages of total area in various land use categories are based on the latest survey completed in 1970. About 38% of drainage area above small desilting and retention dams. For map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1956-59, USDA Misc. Pub. 945, p. 62.5-5. Monthly precipitation Thiessen weighted from rain gages 2, 17, 22 and 28. Precipitation and runoff records began Jan. 1957; but station averages were computed starting with 1958. Maximum discharges and volumes were not computed prior to 1961; poor records 1958-60. For long-time precipitation records, see National Weather Service records at Holly Springs, 4W, Mississippi.

1970 DAILY PRECIPITATION (inches)													OXFORD, MISSISSIPPI WATERSHED W-17A	
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
1	0.0	1.22	0.10	1.74	0.68	2.21	0.0	0.0	0.0	0.0	0.0	0.0		
2	0.0	0.0	0.27	0.0	0.17	1.2	0.0	0.0	0.0	0.0	0.01	0.0		
3	0.0	0.0	2.54	0.0	0.0	0.0	0.02	0.45	0.22	0.0	0.0	0.0		
4	0.0	0.0	0.0	0.0	0.0	0.03	0.00	0.0	0.10	0.0	0.0	0.0		
5	0.0	0.68	0.0	0.0	0.0	0.03	0.0	0.52	0.0	0.0	0.0	0.03		
6	0.04	0.04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.69	0.0	0.0		
8	0.0	0.16	0.0	0.0	0.0	0.0	2.12	0.03	0.0	0.0	0.0	0.0		
9	0.0	0.0	0.0	0.0	0.30	0.0	0.0	0.34	0.0	0.94	1.07	0.0		
10	0.03	0.0	0.0	0.0	2.85	0.0	0.0	0.0	1.14	0.0	0.0	0.0		
11	0.61	0.0	0.17	0.0	0.01	0.0	0.0	0.0	0.0	0.10	0.0	0.35		
12	0.0	0.0	0.32	0.46	0.0	0.0	0.0	0.0	0.0	0.52	0.04	0.0		
13	0.0	0.0	0.0	0.02	0.0	0.48	0.0	0.0	0.0	1.92	0.25	0.0		
14	0.0	0.91	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.47	0.0		
15	0.0	1.78	0.0	0.0	0.0	2.23	0.0	0.0	0.0	0.0	0.0	0.60		
16	0.0	0.0	0.0	0.04	0.59	0.0	0.0	0.01	0.0	0.0	0.0	0.16		
17	0.0	0.0	0.76	3.11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.34	0.0		
19	0.01	0.0	0.86	1.11	0.0	0.0	0.0	0.0	0.03	0.19	0.40	0.17		
20	0.0	0.0	0.05	0.0	0.0	0.05	0.60	0.11	0.0	0.02	0.0	2.43		
21	0.0	0.0	0.47	0.0	0.0	0.19	0.0	0.26	0.0	0.0	0.0	0.02		
22	0.0	0.03	0.0	0.0	0.0	0.43	0.0	0.13	0.0	0.0	0.0	0.36		
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.20	0.23	0.0	0.0	0.62		
24	0.0	0.09	0.02	0.79	0.0	0.0	0.0	0.0	0.0	0.87	0.0	0.0		
25	0.0	0.35	0.49	0.82	0.05	0.0	0.24	0.0	0.0	0.0	0.0	0.0		
26	0.0	0.0	0.0	0.37	0.0	0.02	0.0	0.0	0.20	0.0	0.0	0.0		
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
28	0.0	0.05	0.09	0.0	0.0	0.0	0.0	0.0	0.0	0.48	0.0	0.0		
29	0.51	0.0	0.0	0.0	0.26	0.0	0.0	0.0	0.0	0.0	0.0	0.04		
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.36		
31	0.0	0.0	0.0	0.0	0.33	0.0	0.0	0.0	0.0	0.0	0.0	0.09		
TOTAL	1.19	4.71	6.12	8.46	5.25	6.25	3.42	2.06	1.92	5.74	2.58	5.23		
STA AV	3.39	4.46	4.91	5.30	3.99	2.78	4.32	4.55	4.06	2.33	3.63	5.41		

NOTES: For daily air temperatures in the vicinity, see table for Watershed W-4C (p.62.001-1). Daily precipitation values Thiessen weighted from rain gages 2, 17, 22 and 28. STA AV based on 13 yr (1958-70) record period.

1970 MEAN DAILY DISCHARGE (cfs) OXFORD, MISSISSIPPI WATERSHED W-17A												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	8.90	10.37	0.14	35.20	5.63	16.71	0.0	0.0	0.0	0.0	0.0	0.0
2	7.12	5.56	0.18	15.16	2.19	31.37	0.0	0.0	0.0	0.0	0.0	0.0
3	3.66	1.37	260.27	1.38	0.29	5.87	0.0	0.0	0.0	0.0	0.0	0.0
4	1.19	0.09	17.56	0.06	0.08	2.09	0.0	0.0	0.0	0.0	0.0	0.0
5	0.46	0.08	5.73	0.0	0.09	0.15	0.0	0.0	0.0	0.0	0.0	0.0
6	0.37	0.08	2.67	0.0	0.08	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7	0.16	0.08	1.06	0.0	0.07	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8	1.11	0.08	0.38	0.0	0.07	3.0	4.84	0.0	0.0	0.0	0.0	0.0
9	0.11	0.08	0.14	0.0	0.09	0.0	0.0	0.0	0.0	0.0	0.52	0.0
10	0.09	0.08	0.13	0.0	124.87	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11	0.25	0.08	0.09	0.0	30.52	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	0.26	0.08	0.11	0.0	3.30	0.03	0.0	0.0	0.0	0.0	0.0	0.0
13	0.12	0.04	0.10	0.0	0.75	0.06	0.0	0.0	0.0	1.59	0.0	0.0
14	0.12	2.71	0.08	0.0	0.18	0.03	0.0	0.0	0.0	0.0	0.0	0.0
15	0.12	48.68	0.08	0.0	0.14	62.91	0.0	0.0	0.0	0.0	0.0	0.02
16	3.12	12.68	0.09	0.0	0.14	1.53	0.0	0.0	0.0	0.0	0.0	0.01
17	0.12	3.16	2.30	234.89	0.18	0.11	0.0	0.0	0.0	0.0	0.0	0.0
18	0.12	1.73	0.82	5.84	0.07	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	0.11	0.89	17.42	36.99	0.0	0.0	0.0	0.0	0.0	0.0	0.02	0.0
20	0.09	0.24	4.60	19.19	0.0	0.0	0.0	0.0	0.0	0.0	0.05	32.54
21	0.09	0.14	5.19	8.54	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.70
22	0.09	0.12	3.49	3.52	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.89
23	0.09	0.13	2.32	1.60	0.0	0.0	0.0	0.0	0.0	0.0	0.0	24.90
24	0.09	0.13	1.00	16.92	0.0	0.0	0.0	0.0	0.0	0.00	0.0	1.58
25	0.09	0.14	1.68	22.63	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.41
26	0.09	0.16	1.29	23.99	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.35
27	0.09	0.14	0.05	5.97	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.24
28	0.09	0.14	0.0	2.55	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.04
29	0.09	0.0	0.0	0.70	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	0.09	0.0	0.0	0.47	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	0.12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MEAN	0.794	3.186	10.611	14.520	5.442	4.029	0.156	0.0	0.0	0.051	0.020	2.119
INCHES	0.183	0.664	2.447	3.240	1.255	0.899	0.036	0.0	0.0	0.012	0.004	0.489
STA AV	0.689	1.296	1.488	1.249	0.606	0.115	0.318	0.375	0.416	0.076	0.356	0.950

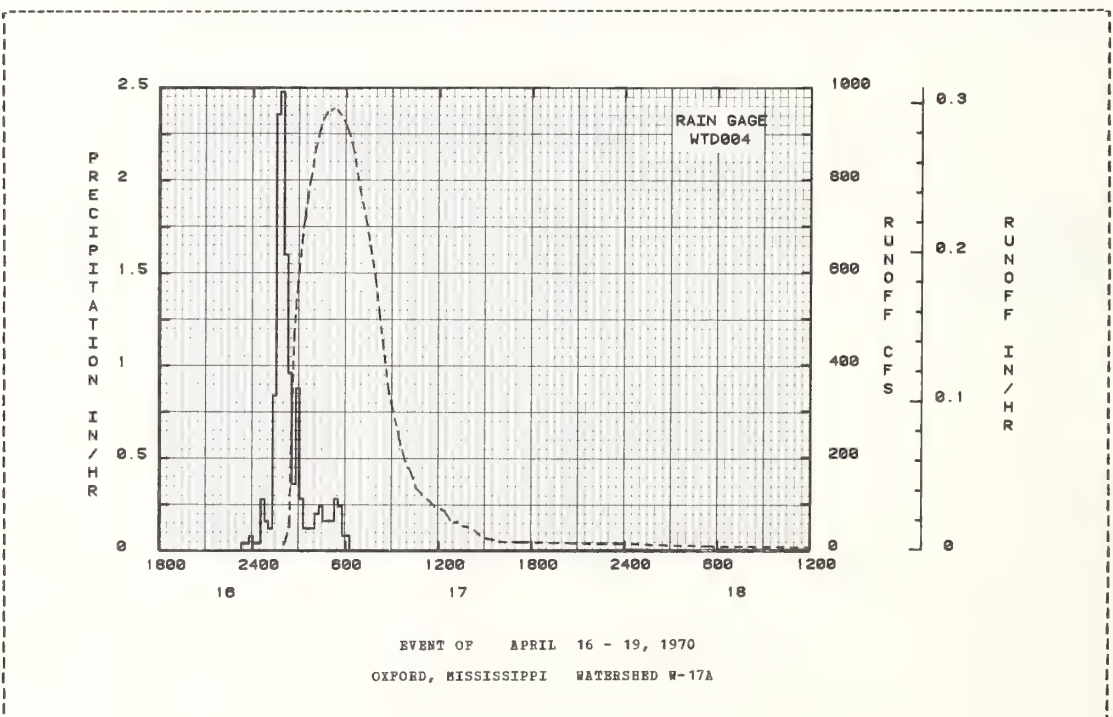
NOTES: To convert discharge in CFS to IN/DAV, multiply by 0.0074380. Quality of records: Poor, estimated to be within 20% of actual. STA AV based on 13 yr (1958-70) record period.

1970 SELECTED RUNOFF EVENT OXFORD, MISSISSIPPI WATERSHED W-17A												
ANTECEDENT CONDITIONS			RAINFALL				RUNOFF					
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.		
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)		
EVENT OF APRIL 16 - 19, 1970												
RG WTD004												
4-16	0.0		4-16	2315	0.0	0.0	4-17	134	0.062	0.0		
4-17		0.0		2330	0.0400	0.01		148	0.400	0.0		
				2345	0.0400	0.02		202	15.520	0.0006		
				2400	0.0800	0.04		214	35.938	0.0022		
			4-17	15	0.0400	0.05		220	59.784	0.0037		
WATERSHED CONDITIONS:												
About 14% of area in cultivation, primarily cotton, soybeans and corn, poor to fair cover; 17% in pasture and idle land, fair to good cover; 68% in woods, good cover; 1% in bare gullies.												
				30	0.0400	0.06		230	290.000	0.0127		
				45	0.2800	0.13		238	464.000	0.0283		
				100	0.1600	0.17		246	528.000	0.0488		
				115	0.1200	0.20		252	570.000	0.0658		
				130	0.8400	0.41		258	606.000	0.0840		
				145	2.3600	1.00		312	684.000	0.1307		
				200	2.4800	1.62		318	712.000	0.1523		
				215	1.6000	2.02		324	737.999	0.1748		
				230	0.9600	2.26		334	776.000	0.2139		
				245	0.3600	2.35		346	816.000	0.2632		
				300	0.8795	2.57		400	866.000	0.3240		
				315	0.2800	2.64		416	904.000	0.3971		
				330	0.1200	2.67		432	934.000	0.4730		
				345	0.1200	2.70		446	948.000	0.5411		
				400	0.1200	2.73		500	952.000	0.6098		
				415	0.2000	2.78		510	956.000	0.6590		
				430	0.2400	2.84		524	952.000	0.7280		
				445	0.1600	2.88		538	942.000	0.7965		
				500	0.1600	2.92		600	918.000	0.9022		
				515	0.1600	2.96		614	896.000	0.9677		
				530	0.2800	3.03		630	860.000	1.0403		
				545	0.2400	3.09		652	782.000	1.1335		
				600	0.0800	3.11		716	716.000	1.2264		
				615	0.0800	3.13		738	642.000	1.3036		
								754	585.999	1.3543		
								808	514.000	1.3941		
								824	436.000	1.4333		
								846	338.000	1.4773		
								902	300.000	1.5037		
								924	244.000	1.5346		

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.0003099. Thiessen weighted storm rainfall, rain gages 2, 17, 22 and 28. For 30-day antecedent P and Q, see tables on pp. 62017-1 and 2.

1970	SELECTED RUNOFF EVENT					OXFORD, MISSISSIPPI		WATERSHED W-17A		
ANTECEDENT CONDITIONS			RAINFALL			RUNOFF				
Date Mo-Day	Rainfall (inches)	Runoff (inches)	Date Mo-Day	Time of Day	Intensity (in/hr)	Acc. (inches)	Date Mo-Day	Time of Day	Rate (cfs)	Acc. (inches)
EVENT OF APRIL 16 - 19, 1970 (CONTINUED)										
							4-17	948	192.000	1.5616
								1010	168.826	1.5821
								1032	133.856	1.5993
								1054	120.437	1.6137
								1132	102.032	1.6355
								1142	94.536	1.6406
								1222	85.000	1.6591
								1244	65.268	1.6676
								1302	60.895	1.6735
								1314	63.095	1.6773
								1336	52.059	1.6838
								1354	51.000	1.6886
								1416	43.568	1.6940
								1438	32.936	1.6984
								1508	24.595	1.7029
								1534	22.855	1.7061
								1554	18.680	1.7082
								1620	17.875	1.7107
								1702	17.875	1.7146
								1748	17.080	1.7188
								1918	15.520	1.7264
								2052	14.755	1.7337
								2222	13.249	1.7402
								2400	13.249	1.7469
							4-18	246	9.586	1.7567
								548	7.000	1.7645
								1254	4.331	1.7770
								2400	3.432	1.7904
							4-19	418	3.024	1.7947
								526	1.990	1.7956

NOTES: To convert runoff in CPS to IN/HR, multiply by 0.0003099. Thiessen weighted storm rainfall, rain gages 2, 17, 22 and 28. For 30-day antecedent P and Q, see tables on pp. 62017-1 and 2.



OXFORD, MISSISSIPPI WATERSHED W-35A

LOCATION: Marshall Co., Miss.; 0.3 mi. W of Chulahoma on State Highway No. 4; Cuffawa Creek, Pigeon Roost Creek Watershed, Yazoo River Basin.

AREA: 1090.07 acres 1.70 sq. miles

MONTHLY PRECIPITATION AND RUNOFF (inches)													OXFORD, MISSISSIPPI WATERSHED W-35A	
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual	
1970 P	1.17	4.06	6.82	6.86	6.90	4.55	3.48	3.31	2.03	6.95	2.51	3.12	51.74	
Q	0.229	1.388	3.950	2.700	2.214	1.014	0.050	0.040	0.006	0.318	0.070	0.530	12.508	
STA AV P	3.40	4.60	5.12	4.88	4.49	2.84	4.06	3.57	4.26	2.44	3.94	5.36	48.96	
Q	1.452	1.900	2.366	1.486	1.123	0.198	0.458	0.438	0.450	0.132	0.616	1.697	12.316	
ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS														
	Maximum Discharge		1 Hour		2 Hours		Maximum Volume for Selected Time Interval		1 Day		2 Days		8 Days	
	Date	Rate	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.
1970	5-10	0.630	5-10	0.574	5-10	0.887	3- 3	1.983	3- 3	2.187	3- 3	2.262	3- 3	2.337
													2-25	2.523
MAXIMUMS FOR PERIOD OF RECORD														
	7- 9	1.300	7- 9	1.270	7- 9	2.390	7- 9	3.240	7- 9	3.280	11-27	3.710	11-27	3.800
	1967		1967		1967		1967		1967		1968		1968	1965

NOTES: Watershed conditions: About 24% in cultivation (cotton, soybeans and corn), fair cover November to March, poor cover April and May improving to good by mid-July; 45% in pasture and idle land, good cover April to October with fair cover remainder of year; 30% in woods, good cover; 1% in bare gullies. Percentages of total area in various land use categories are based on the latest survey completed in 1971. About 6% of drainage area above small desilting and retention dams. For map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1956-59, USDA Misc. Pub. 945, p. 62.12-5. Monthly precipitation Thiessen weighted from rain gages 3, 11, 24 and 26. Precipitation and runoff records began Jan. 1957; but station averages were computed starting with 1958. Maximum discharges and volumes were not computed prior to 1961; poor records 1957-60. For long-time precipitation records, see National Weather Service records at Holly Springs, 4N, Mississippi.

1970 DAILY PRECIPITATION (inches)													OXFORD, MISSISSIPPI WATERSHED W-35A	
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
1	0.0	1.27	0.25	1.32	0.48	1.81	0.0	0.13	0.0	0.0	0.0	0.0		
2	0.0	0.0	0.25	0.14	0.14	1.18	0.0	0.31	0.0	0.0	0.0	0.0		
3	0.0	0.0	2.71	0.0	0.0	0.0	0.20	0.03	0.31	0.0	0.0	0.0		
4	0.0	0.0	0.0	0.0	0.0	0.08	0.00	0.0	0.22	0.0	0.0	0.0		
5	0.0	0.17	0.0	0.0	0.0	0.26	0.0	0.83	0.0	0.0	0.0	0.0		
6	0.05	0.12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.02	0.0	0.0		
8	0.0	0.32	0.0	0.0	0.0	0.0	2.06	0.57	0.0	0.0	0.0	0.0		
9	0.0	0.0	0.0	0.0	0.06	0.0	0.0	0.36	0.0	1.02	1.14	0.0		
10	0.0	0.0	0.0	0.0	3.86	0.0	0.0	0.02	0.99	0.0	0.0	0.0		
11	0.64	0.0	0.15	0.0	0.01	0.0	0.0	0.0	0.0	0.02	0.0	0.37		
12	0.0	0.0	0.34	0.58	0.0	0.0	0.0	0.0	0.0	0.65	0.11	0.0		
13	0.0	0.0	0.0	0.01	0.0	0.15	0.0	0.0	0.01	2.65	0.33	0.0		
14	0.0	0.11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.37	0.0		
15	0.0	1.38	0.0	0.0	0.0	0.98	0.02	0.0	0.0	0.0	0.0	0.75		
16	0.0	0.0	0.0	0.09	0.67	0.0	0.0	0.01	0.0	0.0	0.0	0.14		
17	0.0	0.0	0.87	2.07	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.33	0.0		
19	0.03	0.0	1.09	1.29	0.0	0.0	0.0	0.0	0.0	0.28	0.23	0.15		
20	0.0	0.0	0.05	0.0	0.0	0.0	0.68	0.04	0.0	0.00	0.0	1.17		
21	0.0	0.0	0.50	0.0	0.0	0.07	0.0	0.22	0.0	0.0	0.0	0.0		
22	0.0	0.05	0.0	0.0	0.0	0.0	0.47	0.80	0.0	0.0	0.0	0.03		
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.18	0.0	0.0	0.06		
24	0.0	0.16	0.03	0.59	0.0	0.02	0.0	0.0	0.0	0.87	0.0	0.0		
25	0.0	0.41	0.50	0.58	0.09	0.0	0.04	0.0	0.0	0.0	0.0	0.0		
26	0.0	0.0	0.0	0.34	0.0	0.00	0.0	0.0	0.32	0.0	0.0	0.0		
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
28	0.0	0.08	0.07	0.0	0.0	0.0	0.0	0.0	0.0	0.42	0.0	0.0		
29	0.45	0.0	0.0	0.0	1.15	0.0	0.0	0.0	0.0	0.0	0.0	0.03		
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.0	0.0	0.0	0.33		
31	0.0	0.0	0.0	0.44	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.08		
TOTAL	1.17	4.06	6.82	6.86	6.90	4.55	3.48	3.31	2.03	6.95	2.51	3.12		
STA AV	3.40	4.60	5.12	4.88	4.49	2.84	4.06	3.57	4.26	2.44	3.94	5.36		

NOTES: For daily air temperatures in the vicinity, see table for Watershed W-4C (p.62001-1). Daily precipitation values Thiessen weighted from rain gages 3, 11, 24 and 26. STA AV based on 13 yr (1956-70) record period.

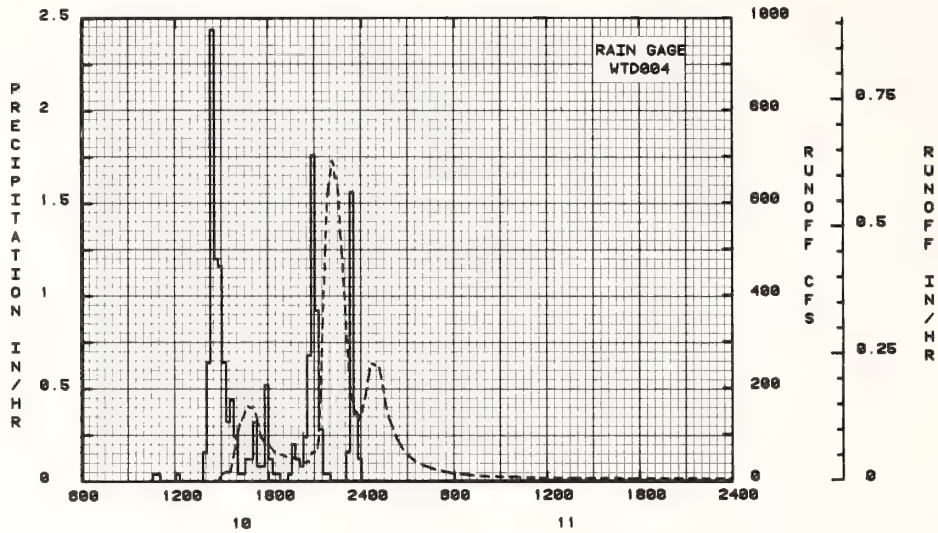
1970 MEAN DAILY DISCHARGE (cfs) OXFORD, MISSISSIPPI WATERSHED W-35A												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.51	15.31	1.37	20.58	0.97	3.35	0.0	0.0	0.0	0.0	0.0	0.0
2	0.25	4.58	1.37	4.46	0.17	35.69	0.0	0.0	0.0	0.0	0.0	0.0
3	0.0	0.82	102.76	1.14	0.0	4.03	0.0	0.0	0.0	0.0	0.0	0.0
4	0.0	0.51	4.35	0.81	0.0	0.85	0.0	0.0	0.0	0.0	0.0	0.0
5	0.0	0.51	2.24	0.61	0.0	0.68	0.0	1.19	0.0	0.0	0.0	0.0
6	0.0	0.51	1.15	0.25	0.0	0.35	0.0	0.0	0.0	0.0	0.0	0.0
7	0.0	0.82	0.52	0.10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8	0.0	2.69	0.43	0.10	0.0	0.0	2.27	0.19	0.0	0.0	0.0	0.0
9	0.0	2.00	0.43	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.89	0.0
10	0.0	1.02	0.21	0.0	65.18	0.0	0.0	0.0	0.26	0.0	0.0	0.0
11	2.45	0.71	0.21	0.0	27.85	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	1.99	0.29	1.57	0.01	2.11	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13	0.87	0.04	0.94	3.20	1.37	0.0	0.0	0.0	0.0	14.36	0.0	0.0
14	0.87	0.17	0.29	0.04	0.60	0.0	0.0	0.0	0.0	0.01	0.96	0.0
15	1.17	19.29	0.04	0.0	0.04	1.50	0.0	0.0	0.0	0.0	0.35	0.0
16	0.70	4.78	0.0	0.0	1.58	0.0	0.0	0.0	0.0	0.0	0.0	1.81
17	0.39	1.73	9.40	38.48	0.35	0.0	0.0	0.0	0.0	0.0	0.0	0.60
18	0.04	1.14	2.31	1.99	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.0
19	0.0	0.63	25.72	29.79	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	0.17	2.93	2.72	0.0	0.0	0.0	0.0	0.0	0.0	0.02	6.39
21	0.0	0.0	7.63	1.37	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10.64
22	0.0	0.04	3.14	1.02	0.0	0.0	0.0	0.42	0.0	0.0	0.0	2.23
23	0.01	0.04	1.37	0.63	0.0	0.0	0.0	0.02	0.0	0.0	0.0	1.38
24	0.0	0.17	1.02	2.34	0.0	0.0	0.0	0.0	0.0	0.21	0.0	0.45
25	0.0	2.65	3.05	3.67	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	0.0	0.52	3.38	8.03	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	0.0	1.03	1.02	1.38	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	0.0	1.37	0.81	0.71	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	1.12	0.61	0.25	0.61	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	0.10	0.43	0.0	0.10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	0.0	0.21	0.0	0.44	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.75
MEAN	0.3377	2.2697	5.8352	4.1221	3.2705	1.5484	0.0733	0.0587	0.0087	0.4703	0.1076	0.7824
INCHES	0.229	1.388	3.950	2.700	2.214	1.014	0.050	0.040	0.006	0.318	0.070	0.530
STA AV	1.452	1.900	2.366	1.486	1.123	0.198	0.458	0.438	0.450	0.132	0.616	1.697

NOTES: To convert discharge in CFS to IN/DAY, multiply by 0.0218364. Quality of records: Fair, estimated to be within 15% of actual. STA AV based on 13 yr (1958-70) record period.

1970 SELECTED RUNOFF EVENT OXFORD, MISSISSIPPI WATERSHED W-35A											
ANTECEDENT CONDITIONS			RAINFALL			RUNOFF					
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.	
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)	
EVENT OF MAY 10 - 14, 1970											
5-10	RG WTD004	0.0	5-10	RG WTD004			5-10	1430	0.341	0.0	
	0.0			1030	0.0	0.0		1434	2.350	0.0001	
				1045	0.0400	0.01		1446	3.149	0.0006	
				1100	0.0400	0.02		1452	8.027	0.0011	
				1115	0.0	0.02		1500	15.702	0.0025	
				1130	0.0	0.02					
				1145	0.0	0.02		1508	18.722	0.0046	
				1200	0.0	0.02		1514	20.655	0.0064	
				1215	0.0400	0.03		1526	19.355	0.0100	
				1230	0.0	0.03		1532	21.995	0.0119	
				1245	0.0	0.03		1538	35.855	0.0145	
				1300	0.0	0.03		1546	62.720	0.0205	
				1315	0.0	0.03		1558	98.280	0.0351	
				1330	0.0	0.03		1608	123.437	0.0519	
				1345	0.0	0.03		1616	130.872	0.0673	
				1400	0.1600	0.07		1630	151.000	0.0972	
				1415	0.6400	0.23		1638	162.753	0.1162	
				1430	2.4400	0.84		1648	159.375	0.1406	
				1445	1.2000	1.14		1656	159.375	0.1599	
				1500	1.1600	1.43		1702	161.056	0.1745	
				1515	0.6400	1.59		1714	135.619	0.2015	
				1530	0.3200	1.67		1730	95.480	0.2296	
				1545	0.4400	1.78		1746	80.795	0.2510	
				1600	0.2400	1.84		1804	77.000	0.2725	
				1615	0.0400	1.85		1822	63.855	0.2917	
				1630	0.0400	1.86		1844	57.195	0.3119	
				1645	0.1200	1.89		1908	52.955	0.3320	
				1700	0.1200	1.92		1938	49.880	0.3554	
				1715	0.3200	2.00		2000	44.955	0.3712	
				1730	0.3800	2.02		2024	39.375	0.3865	
				1745	0.0800	2.04		2036	44.000	0.3941	
				1800	0.5200	2.17		2048	61.595	0.4037	
				1815	0.1200	2.20		2100	63.855	0.4151	
				1830	0.0400	2.21		2108	70.875	0.4233	
				1845	0.0400	2.22		2114	94.095	0.4308	
				1900	0.0	2.22		2122	194.928	0.4463	

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.0039098. Thiessen weighted storm rainfall, rain gages 3, 11, 24 and 26. For 30-day antecedent P and Q, see tables on pp. 62018-1 and 2.

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.0009098. Thiessen weighted storm rainfall, rain gages 3, 11, 24 and 26. For 30-day antecedent P and Q, see tables on pp. 62018-1 and 2.



EVENT OF MAY 10 - 14, 1970
OXFORD, MISSISSIPPI WATERSHED W-35A

TOMBSTONE, ARIZONA WATERSHED W-1

LOCATION: Cochise County, Arizona; 5.6 miles W of Tombstone; Walnut Gulch, San Pedro River, Gila River, Colorado River Basin.

AREA: 36900.00 acres 57.66 sq. miles

MONTHLY PRECIPITATION AND RUNOFF (inches)														TOMBSTONE, ARIZONA WATERSHED W-1													
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual													
1970	P	0.0	0.32	1.32	0.21	0.02	0.06	2.75	3.62	1.46	0.08	0.00	0.40	10.24													
	Q	0.0	0.0	0.0	0.0	0.0	0.0	0.020	0.060	0.014	0.0	0.0	0.0	0.094													
STA AV	P	0.33	0.72	0.94	0.18	0.14	0.03	3.34	3.79	1.04	0.08	0.27	0.49	11.34													
	Q	0.0	0.0	0.0	0.0	0.0	0.0	0.022	0.054	0.006	0.0	0.0	0.0	0.082													
ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																											
		Maximum Discharge		1 Hour		2 Hours		Maximum Volume for Selected Time Interval		6 Hours		12 Hours		2 Days		8 Days											
		Date	Rate	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.										
1970		7-20	0.019	8-16	0.012	8-16	0.016	8-16	0.018	8-16	0.018	8-16	0.034	8-16	0.035	8-10	0.049										
MAXIMUMS FOR PERIOD OF RECORD																											
		7-22	0.130	7-22	0.080	9- 9	0.130	9- 9	0.160	9- 9	0.190	9- 9	0.190	9- 8	0.230	9- 8	0.310										
		1964		1964		1964		1964		1964		1964		1964		1964											

NOTES: Watershed Conditions: 65% of area in desert shrubs (whitethorn, creosotebush and tarbush) with 25% cover and 2% grass cover. 35% is grassland with approximately 20% grass cover (crown spread) and 5% shrub cover. For topography, geological and vegetation maps, see pages 63.1-3, 63.1-4, and 63.1-5, respectively, of Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1966, USDA Misc. Pub. 1226. Precipitation data: records began January 1954. Monthly totals are Thiessen weighted averages of 90 gages. Station averages are based on 1968-70 data. Runoff Data: Records began April 1964, station averages are based on 1966, 1968-70 data. For long-time precipitation records, see National Weather Service records at Tombstone, Arizona.

1970 DAILY AIR TEMPERATURE (degrees F)														TOMBSTONE, ARIZONA WATERSHED W-1													
Day		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec														
		max min	max min	max min	max min	max min	max min	max min	max min	max min	max min	max min	max min														
1		49 27	56 29	64 48	59 34	69 37	89 62	96 68	93 64	98 68	81 52	78 47	66 37														
2		40 22	50 27	55 42	72 36	68 45	91 62	92 67	91 65	98 71	77 55	70 47	72 45														
3		42 22	60 27	61 37	72 43	74 44	93 64	93 68	91 64	92 70	74 52	68 43	68 40														
4		49 32	73 40	63 37	70 40	86 50	93 64	94 70	93 65	72 64	79 54	64 42	76 49														
5		50 28	69 44	52 44	72 42	86 55	85 65	96 70	93 69	80 66	81 53	75 43	71 40														
6		46 22	69 41	54 33	78 46	85 55	88 57	98 70	95 68	83 65	81 51	78 46	72 48														
7		48 26	69 43	65 33	73 45	80 50	89 60	98 66	99 73	90 65	80 56	73 51	79 49														
8		53 28	70 43	71 40	76 44	78 48	89 62	92 64	91 68	91 66	69 40	66 38	76 49														
9		58 33	66 45	66 42	74 46	82 49	85 61	96 65	90 64	91 66	80 43	71 41	69 46														
10		61 35	71 44	58 39	79 47	86 50	86 57	92 66	89 68	84 65	80 48	76 47	61 38														
11		62 33	58 48	52 28	78 52	89 53	84 56	98 70	87 66	91 66	76 48	77 44	58 33														
12		62 40	69 41	58 32	79 48	88 53	87 59	100 73	91 70	89 68	84 49	75 45	62 34														
13		58 36	70 43	64 37	81 52	89 56	87 63	104 75	94 66	87 61	83 55	63 39	64 44														
14		63 34	64 44	74 43	73 53	90 53	92 62	97 71	95 70	87 65	82 54	63 39	61 43														
15		56 39	62 35	73 44	72 37	86 56	93 59	99 71	91 64	88 56	82 56	58 35	55 30														
16		62 33	69 38	66 45	72 48	90 59	94 61	97 71	90 64	89 56	72 48	73 37	66 34														
17		63 41	76 46	71 41	56 52	94 65	97 60	97 70	89 64	85 61	64 45	75 42	68 40														
18		60 34	66 40	68 47	53 36	98 64	101 63	102 71	90 66	89 62	76 50	75 45	56 41														
19		63 33	68 36	66 33	68 36	94 64	101 67	100 72	91 65	92 62	76 54	70 38	59 40														
20		65 37	52 36	60 35	74 42	93 65	99 68	93 66	91 67	88 65	79 53	71 43	53 36														
21		70 38	53 36	64 33	71 48	91 58	94 66	89 67	92 67	88 64	77 49	76 44	54 34														
22		68 40	64 35	68 39	72 36	90 61	96 67	92 66	92 68	83 60	73 50	76 46	51 35														
23		77 44	67 41	76 38	75 36	91 59	100 70	93 68	89 65	88 56	75 46	74 45	57 27														
24		76 46	63 35	75 42	78 43	91 59	103 71	91 72	88 65	90 57	76 46	72 40	65 36														
25		72 46	69 40	74 45	78 46	83 60	103 75	89 66	90 65	90 57	74 48	76 53	70 43														
26		74 45	70 44	75 42	78 48	83 58	102 77	94 68	91 65	74 58	72 44	71 50	61 45														
27		73 45	68 50	59 40	73 49	82 53	101 76	96 67	93 66	67 49	61 37	68 49	49 46														
28		66 42	69 39	66 35	65 38	86 54	97 70	83 69	92 65	62 51	65 37	74 51	52 48														
29		57 30		65 36	55 30	90 56	92 65	88 67	92 66	76 45	75 42	76 49	55 40														
30		60 26		68 34	62 33	91 59	92 65	95 71	97 66	89 54	82 48	60 42	60 31														
31		53 35		60 46		92 59		95 68	97 67		82 51		64 36														
AV.		60 35	65 40	65 39	71 43	86 55	93 64	95 69	92 66	85 61	76 49	71 44	63 40														
MEAN		47.3	52.5	52.1	57.1	70.7	79.0	81.9	79.1	73.4	62.7	57.8	51.5														
STA AV		58 35	60 36	66 40	74 45	84 53	90 61	92 67	89 65	84 60	79 52	67 43	59 37														

NOTES: STA AV values are based on 7 yr (1964-1970) record period.

1970 DAILY PRECIPITATION (inches) TOMBSTONE, ARIZONA WATERSHED W-1												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.0	0.0	0.33E	0.0	0.0	0.0	0.01	0.51E	0.0	0.01E	0.0	0.0
2	0.0	0.0	0.28E	0.0	0.0	0.0	0.01	0.25E	0.01E	0.05E	0.0	0.0
3	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.05E	0.22E	0.01	0.0	0.0
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.03	0.59E	0.0	0.0	0.0
5	0.0	0.0	0.41E	0.0	0.0	0.0	0.0	0.02	0.02E	0.0	0.0	0.0
6	0.0	0.0	0.22E	0.0	0.0	0.0	0.0	0.01E	0.0	0.0	0.0	0.0
7	0.0	0.0	0.0	0.0	0.0	0.0	0.10	0.05	0.0	0.0	0.0	0.0
8	0.0	0.0	0.0	0.0	0.0	0.0	0.03E	0.0	0.26E	0.0	0.0	0.0
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.21	0.31E	0.0	0.0	0.0
10	0.0	0.0	0.02E	0.0	0.0	0.0	0.0	1.00E	0.00	0.0	0.0	0.0
11	0.0	0.29E	0.07E	0.0	0.0	0.0	0.0	0.01	0.00	0.0	0.0	0.0
12	0.0	0.0	0.00	0.0	0.0	0.0	0.0	0.0	0.00	0.0	0.0	0.0
13	0.0	0.0	0.0	0.0	0.0	0.0	0.01	0.0	0.0	0.0	0.0	0.0
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.19E	0.0	0.0	0.0	0.00
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.08E	0.00	0.0	0.0	0.0
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.43E	0.0	0.0	0.0	0.0
17	0.0	0.0	0.0	0.16E	0.0	0.0	0.00	0.31E	0.0	0.0	0.0	0.0
18	0.0	0.0	0.0	0.05E	0.0	0.0	0.01E	0.01	0.0	0.0	0.0	0.00
19	0.0	0.0	0.0	0.0	0.0	0.0	0.18E	0.04E	0.0	0.0	0.0	0.0
20	0.0	0.01E	0.0	0.0	0.0	0.0	0.81E	0.00E	0.0	0.0	0.0	0.0
21	0.0	0.01E	0.0	0.0	0.0	0.0	0.01E	0.00	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.0	0.0	0.01	0.0	0.16E	0.0	0.0	0.0	0.0
23	0.0	0.01E	0.0	0.0	0.0	0.0	0.0	0.17E	0.0	0.0	0.0	0.0
24	0.0	0.0	0.0	0.0	0.0	0.0	0.31E	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.01	0.0	0.12E	0.0	0.0	0.0	0.0	0.0
26	0.0	0.0	0.0	0.0	0.01	0.0	0.00	0.08	0.0	0.0	0.00	0.0
27	0.0	0.00	0.0	0.0	0.01E	0.0	0.01	0.0	0.0	0.0	0.0	0.39E
28	0.0	0.0	0.0	0.0	0.0	0.02	0.43E	0.0	0.0	0.0	0.0	0.0
29	0.0	0.0	0.0	0.0	0.0	0.02	0.39E	0.0	0.0	0.0	0.0	0.0
30	0.0	0.0	0.0	0.0	0.0	0.0	0.21E	0.0	0.05E	0.0	0.0	0.0
31	0.0	0.0	0.0	0.0	0.0	0.0	0.42E	0.0	0.0	0.0	0.0	0.0
TOTAL	0.0	0.32	1.32	0.21	0.02	0.06	2.75	3.62	1.46	0.08	0.00	0.40
STA AV	0.33	0.72	0.94	0.18	0.14	0.03	3.34	3.79	1.04	0.08	0.27	0.49

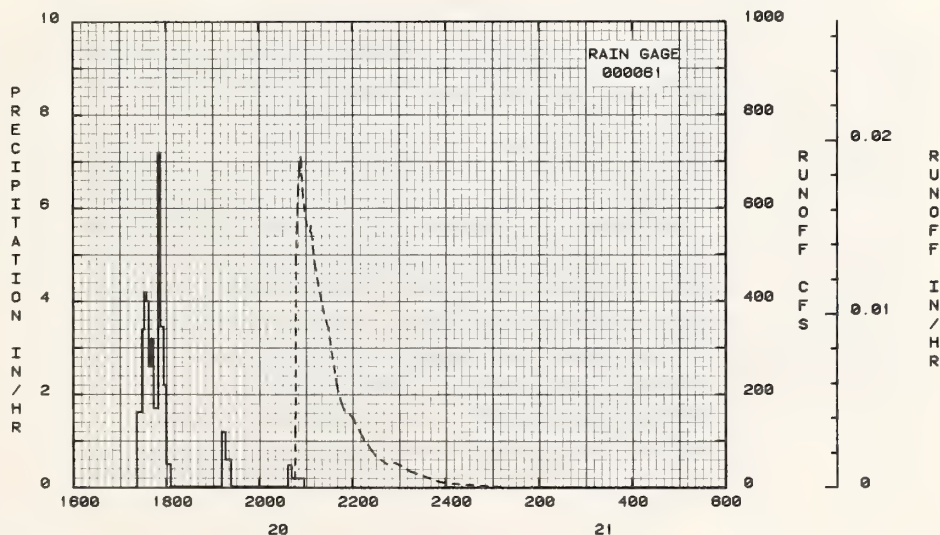
NOTES: Data are Thiessen weighted averages of values from 90 gages. STA AV are for 3 yr only (1968-70).

1970 MEAN DAILY DISCHARGE (cfs) TOMBSTONE, ARIZONA WATERSHED W-1												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.854E	0.0	0.0	0.0	0.0
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	19.492E	0.0	0.0	0.0	0.0
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.354	0.0	0.0	0.0	0.0
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	21.267E	0.0	0.0	0.0
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.044E	0.0	0.0	0.0	0.0
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	22.211E	0.0	0.0	0.0	0.0
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.083E	0.0	0.0	0.0	0.0
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	17.304	0.0	0.0	0.0	0.0
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	36.792E	0.0	0.0	0.0	0.0
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.124E	0.0	0.0	0.0	0.0
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.0	0.0	0.0	0.0	23.893E	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	0.0	0.205E	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.232	0.0	0.0	0.0	0.0
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.060	0.0	0.0	0.0	0.0
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	1.574	0.0	0.0	0.0	0.0	0.0
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	0.0	0.0	0.0	0.0	0.0	0.0	1.146E	0.0	0.0	0.0	0.0	0.0
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	0.0	0.0	0.0	0.0	0.0	0.0	4.445	0.0	0.0	0.0	0.0	0.0
MEAN	0.0	0.0	0.0	0.0	0.0	0.0	1.0085	2.9854	0.7089	0.0	0.0	0.0
INCHES	0.0	0.0	0.0	0.0	0.0	0.0	0.020	0.060	0.014	0.0	0.0	0.0
STA AV	0.0	0.0	0.0	0.0	0.0	0.0	0.022	0.054	0.006	0.0	0.0	0.0

NOTES: To convert mean daily discharge in CFS to IN/DAY, multiply by 0.000645. STA AV are for 4 yr only (1966, 1968-70). Previously published data are being reevaluated.

1970 SELECTED RUNOFF EVENT			TOMBSTONE, ARIZONA WATERSHED W-1							
ANTECEDENT CONDITIONS			RAINFALL				RUNOFF			
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)
EVENT OF JULY 20 - 21, 1970										
7-20	BG 000061		7-20	BG 000061			7-20			
	0.0	0.0		1722	0.0	0.0		2045	0.0	0.0
				1729	1.6285	0.19		2046	3.368	0.0
				1732	3.3998	0.36		2047	117.951	0.0
				1735	4.1997	0.57		2048	485.896	0.0001
				1738	3.9998	0.77		2049	555.443	0.0004
WATERSHED CONDITIONS:										
65% of area in desert shrubs				1741	2.6006	0.90		2050	595.561	0.0006
(Whitethorn, creosotebush and				1744	3.1998	1.06		2051	651.471	0.0009
tarbush) with 23% cover and				1750	1.6999	1.23		2052	673.157	0.0012
2% grass cover. 35% is in				1753	7.1996	1.59		2053	695.239	0.0016
grassland with approximately				1757	3.4501	1.82		2054	710.177	0.0019
20% grass cover (crown										
spread) and 5% shrub cover.				1800	2.1999	1.93		2055	687.833	0.0022
				1806	0.5000	1.98		2057	623.167	0.0028
				1912	0.0182	2.00		2102	562.021	0.0041
				1917	1.2001	2.10		2106	548.906	0.0051
				1924	0.6000	2.17		2107	562.021	0.0053
				2037	0.0164	2.19		2112	479.829	0.0065
				2042	0.4799	2.23		2117	432.802	0.0075
				2058	0.1875	2.28		2122	388.449	0.0084
								2130	336.719	0.0097
								2135	276.100	0.0104
								2140	220.815	0.0109
								2145	187.318	0.0114
								2150	165.474	0.0118
								2200	150.682	0.0125
								2215	103.056	0.0134
								2230	68.157	0.0140
								2245	49.928	0.0144
								2255	53.352	0.0146
								2315	34.160	0.0150
								2351	12.179	0.0154
								2400	8.436	0.0154
								110	0.0	0.0155

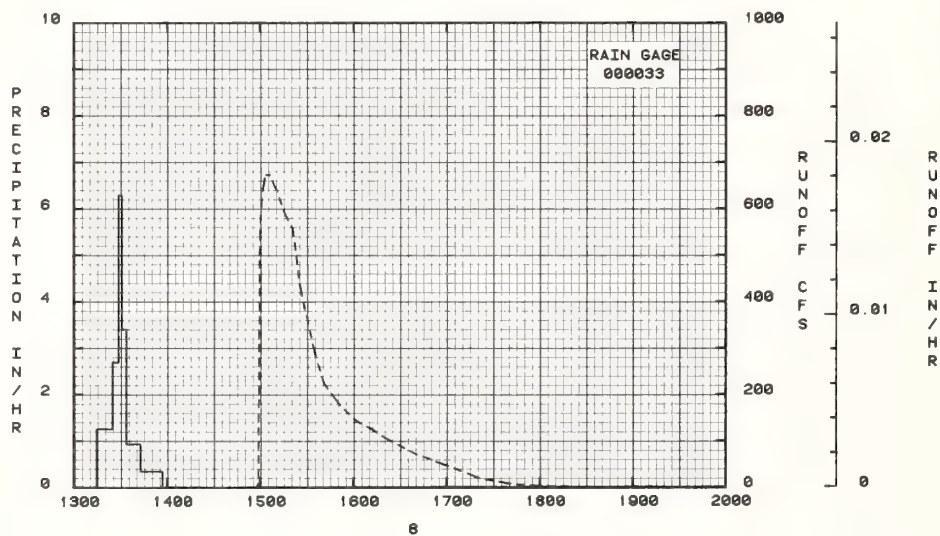
NOTES: To convert runoff in CFS to IN/HR, multiply by 0.0000269.



EVENT OF JULY 20 - 21, 1970
TOMBSTONE, ARIZONA WATERSHED W-1

1970 SELECTED RUNOFF EVENT			TOMBSTONE, ARIZONA WATERSHED W-1							
ANTECEDENT CONDITIONS			RAINFALL				RUNOFF			
Date Mo-Day	Rainfall (inches)	Runoff (inches)	Date Mo-Day	Time of Day	Intensity (in/hr)	Acc. (inches)	Date Mo-Day	Time of Day	Rate (cfs)	Acc. (inches)
EVENT OF SEPTEMBER 8 - 9, 1970										
RG 000033			RG 000033							
9- 8	0.0	0.0	9- 8	1315	0.0	0.0	9- 8	1458	0.0	0.0
				1325	1.2600	0.21		1459	8.436	0.0
				1329	2.7000	0.39		1500	555.443	0.0001
				1331	6.2999	0.60		1501	623.167	0.0003
				1334	3.4000	0.77		1503	665.885	0.0008
WATERSHED CONDITIONS: 65% of area in desert shrubs (Whitethorn, creosotebush and tarbush) with 23% cover and 2% grass cover. 35% is in grassland with approximately 20% grass cover (crown spread) and 5% shrub cover.				1343	0.9333	0.91	1504	673.157	0.0012	
				1357	0.3429	0.99	1506	673.157	0.0018	
				9- 9	1910	0.0	0.99	1511	637.232	0.0032
					1926	0.1875	1.04	1516	588.767	0.0046
					2019	0.0679	1.10	1521	555.443	0.0059
					2036	0.1412	1.14	1526	427.114	0.0070
					2051	0.0800	1.16	1531	351.810	0.0079
					2103	0.2500	1.21	1536	280.000	0.0086
					2119	0.1125	1.24	1541	224.313	0.0092
					2132	0.1385	1.27	1551	177.794	0.0101
				2149	0.0353	1.28	1601	144.956	0.0108	
				2159	0.1200	1.30	1611	125.767	0.0114	
							1621	105.471	0.0119	
							1641	70.132	0.0127	
							1701	45.000	0.0132	
							1721	19.245	0.0135	
							1741	6.645	0.0136	

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.0000269.



EVENT OF SEPTEMBER 8 - 9, 1970
TOMBSTONE, ARIZONA WATERSHED W-1

TOMBSTONE, ARIZONA WATERSHED W-2

LOCATION: Cochise County, Arizona; 2-3/4 miles NW of Tombstone, Walnut Gulch, San Pedro River, Gila River, Colorado River Basin.

AREA: 28100.00 acres 43.90 sq. miles

MONTHLY PRECIPITATION AND RUNOFF (inches)														TOMBSTONE, ARIZONA WATERSHED W-2															
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual															
1970	P	0.0	0.32	1.32	0.23	0.02	0.04	2.98	3.82	1.52	0.05	0.0	0.40	10.71															
	Q	0.0	0.0	0.0	0.0	0.0	0.0	0.059	0.119	0.027	0.0	0.0	0.0	0.205															
STA AV	P	0.35	0.75	0.92	0.18	0.15	0.03	3.22	3.73	1.05	0.08	0.29	0.50	11.24															
	Q	0.0	0.0	0.0	0.0	0.0	0.0	0.048	0.067	0.011	0.0	0.0	0.0	0.125															
ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																													
		Maximum Discharge		1 Hour		2 Hours		Maximum Volume for Selected Time Interval		6 Hours		12 Hours		1 Day		2 Days		8 Days											
		Date	Rate	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.										
1970		9-8	0.043	7-20	0.030	7-20	0.039	7-20	0.042	7-20	0.043	8-16	0.053	8-16	0.054	8-10	0.092												
MAXIMUMS FOR PERIOD OF RECORD																													
		7-26	0.160	7-26	0.130	7-26	0.170	7-26	0.210	9-9	0.240	9-9	0.240	9-9	0.240	9-9	0.240	9-9	0.430										
		1959		1959		1969		1959		1964		1964		1964		1964		1964											

NOTES: Watershed Conditions: 55% of area in oak woodland and desert shrubs (whitethorn, creosotebrush, tarbush and acornia), with a 25% crown spread cover. 45% of area supports grass (black grama, curly mesquite, tobosa, blue grama and sideoats grama), with a basal area of 2.5%, and a shrub cover of approximately 6% crown spread. For topographic, geological and vegetation maps, see pages 63.1-3, 63.1-4, and 63.1-5, respectively of Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1966, USDA Misc. Pub. 1226. Precipitation Data: records began January 1954. Monthly totals are Thiessen weighted averages from 69 gages, station averages are for 3 yr only (1968-70). Runoff Data: Records began July 1959, station averages are based on 1966, 1968-70 data. Temperature Data: See table of daily maximum and minimum value included for Watershed 63.001. For long-time precipitation records, see National Weather Service records at Tombstone, Arizona.

1970 DAILY PRECIPITATION (inches)													TOMBSTONE, ARIZONA WATERSHED W-2												
	Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec												
1	0.0	0.0	0.34E	0.0	0.0	0.0	0.0	0.01	0.56E	0.0	0.01E	0.0	0.0												
2	0.0	0.0	0.31E	0.0	0.0	0.0	0.0	0.01	0.24E	0.01E	0.04E	0.0	0.0												
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.06E	0.20E	0.0	0.0	0.0												
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.01	0.62E	0.0	0.0	0.0												
5	0.0	0.0	0.37E	0.0	0.0	0.0	0.0	0.0	0.01	0.02E	0.0	0.0	0.0												
6	0.0	0.0	0.22E	0.0	0.0	0.0	0.0	0.0	0.00	0.0	0.0	0.0	0.0												
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.12	0.06	0.0	0.0	0.0	0.0												
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.02E	0.0	0.27E	0.0	0.0	0.0												
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.28	0.34	0.0	0.0	0.0												
10	0.0	0.0	0.02E	0.0	0.0	0.0	0.0	0.0	0.59E	0.00	0.0	0.0	0.0												
11	0.0	0.30E	0.07E	0.0	0.0	0.0	0.0	0.0	0.02	0.0	0.0	0.0	0.0												
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.0	0.0	0.0												
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.0	0.0	0.0	0.0	0.0												
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.21E	0.0	0.0	0.0	0.00												
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.07E	0.00	0.0	0.0	0.0												
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.53E	0.0	0.0	0.0	0.0												
17	0.0	0.0	0.0	0.16E	0.0	0.0	0.0	0.00	0.37E	0.0	0.0	0.0	0.0												
18	0.0	0.0	0.0	0.07E	0.0	0.0	0.0	0.01E	0.01	0.0	0.0	0.0	0.0												
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.12E	0.05E	0.0	0.0	0.0	0.0												
20	0.0	0.01E	0.0	0.0	0.0	0.0	0.0	0.95E	0.00E	0.0	0.0	0.0	0.0												
21	0.0	0.01E	0.0	0.0	0.0	0.0	0.0	0.01E	0.00	0.0	0.0	0.0	0.0												
22	0.0	0.0	0.0	0.0	0.0	0.00	0.00	0.0	0.11E	0.0	0.0	0.0	0.0												
23	0.0	0.01E	0.0	0.0	0.0	0.0	0.0	0.0	0.16E	0.0	0.0	0.0	0.0												
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.40E	0.0	0.0	0.0	0.0	0.0												
25	0.0	0.0	0.0	0.0	0.0	0.01	0.0	0.09E	0.0	0.0	0.0	0.0	0.0												
26	0.0	0.0	0.0	0.0	0.01	0.0	0.0	0.0	0.09	0.0	0.0	0.0	0.0												
27	0.0	0.0	0.0	0.0	0.01E	0.0	0.0	0.01	0.0	0.0	0.0	0.0	0.0												
28	0.0	0.0	0.0	0.0	0.0	0.0	0.02	0.48E	0.0	0.0	0.0	0.0	0.0												
29	0.0	0.0	0.0	0.0	0.0	0.02	0.02	0.02E	0.0	0.0	0.0	0.0	0.0												
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.21E	0.0	0.05E	0.0	0.0	0.0												
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.51E	0.0	0.0	0.0	0.0	0.0												
TOTAL	0.0	0.32	1.32	0.23	0.02	0.04	0.04	2.98	3.82	1.52	0.05	0.0	0.40												
STA AV	0.35	0.75	0.92	0.18	0.15	0.03	0.03	3.22	3.73	1.05	0.08	0.29	0.50												

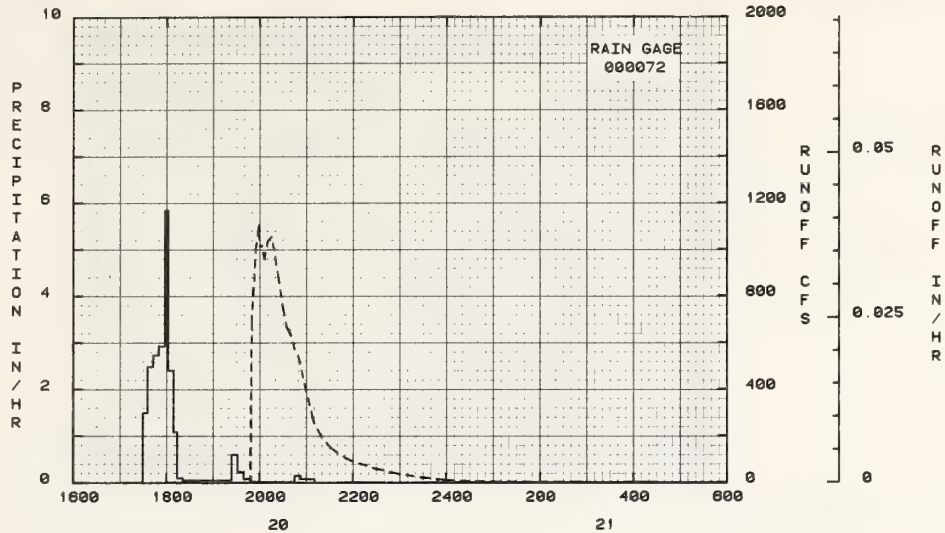
NOTES: Data are Thiessen weighted averages of values from 69 gages. STA AV are for 3 yr only (1968-70).

1970		MEAN DAILY DISCHARGE (cfs)					TOMBSTONE, ARIZONA WATERSHED W-2						
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	13.948E	0.005E	0.0	0.0	0.0	
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.923	0.005E	0.0	0.0	0.0	
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.014	0.013E	0.0	0.0	0.0	
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.010	0.035E	0.0	0.0	0.0	
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.013E	0.026E	0.0	0.0	0.0	
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.009E	0.019E	0.0	0.0	0.0	
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.005E	0.013E	0.0	0.0	0.0	
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.003E	31.775E	0.0	0.0	0.0	
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9.300	0.065E	0.0	0.0	0.0	
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	45.157E	0.0	0.0	0.0	0.0	
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.380E	0.0	0.0	0.0	0.0	
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.035E	0.0	0.0	0.0	0.0	
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.026E	0.0	0.0	0.0	0.0	
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.023	0.0	0.0	0.0	0.0	
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.020	0.0	0.0	0.0	0.0	
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	35.757E	0.0	0.0	0.0	0.0	
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	27.662E	0.0	0.0	0.0	0.0	
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.419E	0.0	0.0	0.0	0.0	
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.044E	0.0	0.0	0.0	0.0	
20	0.0	0.0	0.0	0.0	0.0	0.0	49.962E	0.044E	0.0	0.0	0.0	0.0	
21	0.0	0.0	0.0	0.0	0.0	0.0	0.249E	0.044E	0.0	0.0	0.0	0.0	
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.035E	0.0	0.0	0.0	0.0	
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.026E	0.0	0.0	0.0	0.0	
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.026E	0.0	0.0	0.0	0.0	
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.026E	0.0	0.0	0.0	0.0	
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.019E	0.0	0.0	0.0	0.0	
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.013E	0.0	0.0	0.0	0.0	
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.013E	0.0	0.0	0.0	0.0	
29	0.0	0.0	0.0	0.0	0.0	0.0	2.620	0.013E	0.0	0.0	0.0	0.0	
30	0.0	0.0	0.0	0.0	0.0	0.0	0.002	0.009E	0.0	0.0	0.0	0.0	
31	0.0	0.0	0.0	0.0	0.0	0.0	16.671E	0.005E	0.0	0.0	0.0	0.0	
MEAN	0.0	0.0	0.0	0.0	0.0	0.0	2.2821	4.5490	1.0652	0.0	0.0	0.0	
INCHES	0.0	0.0	0.0	0.0	0.0	0.0	0.659	0.119	0.027	0.0	0.0	0.0	
STA AV	0.0	0.0	0.0	0.0	0.0	0.0	0.048	0.067	0.011	0.0	0.0	0.0	

NOTES: To convert mean daily discharge in CFS to IN/DAY, multiply by 0.000847. STA AV are based on 1966, 1968-70 data.

1970			SELECTED RUNCFF EVENT			TOMBSTONE, ARIZONA			WATERSHED W-2		
ANTECEDENT CONDITIONS			RAINFALL			RUNCFF					
Date Mo-Day	Rainfall (inches)	Runoff (inches)	Date Mo-Day	Time of Day	Intensity (in/hr)	Acc. (inches)	Date Mo-Day	Time of Day	Rate (cfs)	Acc. (inches)	
EVENT OF JULY 20 - 21, 1970											
7-20	SG 000072		7-20	RG 000072			7-20				
	0.0	0.0		1730	0.0	0.0		1948	0.0	0.0	
				1736	1.5001	0.15		1950	715.498	0.0004	
				1743	2.4857	0.44		1955	1000.000	0.0029	
				1750	2.7428	0.76		1959	1106.027	0.0054	
				1758	2.9250	1.15		2000	1015.937	0.0061	
WATERSHED CONDITIONS:											
Oak woodland and desert shrubs				1802	5.8501	1.54		2003	1015.937	0.0078	
Whitethorn, creosotebush,				1809	2.4000	1.82		2006	957.601	0.0096	
tarbush, and mormonia) with				1814	1.0801	1.91		2010	1032.011	0.0119	
a crown spread of 25% cover,				1821	0.0857	1.92		2015	1956.377	0.0151	
occupy 55% of the area. The				1924	0.0381	1.96		2020	965.997	0.0180	
remaining 45% supports grass											
(black grass, curly mesquite,				1932	0.6000	2.04		2025	855.773	0.0206	
tobosa, blue grass, and				1940	0.2250	2.07		2030	747.121	0.0230	
sideoats grass) with a				1949	0.0667	2.08		2035	664.266	0.0250	
basal area of 2.5% cover,				2045	0.0107	2.09		2040	629.331	0.0269	
and a shrub cover of				2053	0.1500	2.11		2045	571.321	0.0287	
approximately 6% crown spread.											
				2111	0.0667	2.13		2050	538.592	0.0303	
								2100	390.946	0.0331	
								2110	254.667	0.0350	
								2120	191.992	0.0363	
								2130	152.866	0.0373	
								2140	125.149	0.0381	
								2150	106.064	0.0388	
								2200	88.898	0.0394	
								2230	58.054	0.0407	
								2300	34.978	0.0415	
								2330	20.451	0.0420	
								2400	9.172	0.0423	
							7-21	1	7.674	0.0423	
								30	4.194	0.0424	
								101	2.335	0.0425	
								129	1.119	0.0425	
								201	0.340	0.0425	
								231	0.044	0.0425	
								255	0.0	0.0425	

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.0000353.



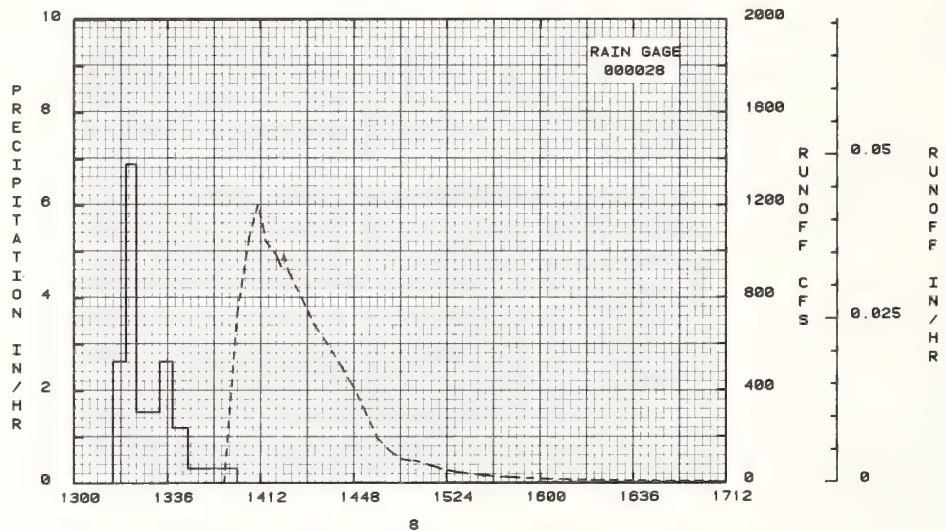
EVENT OF JULY 20 - 21, 1970
TOMBSTONE, ARIZONA WATERSHED W-2

1970 SELECTED RUNOFF EVENT						TOMBSTONE, ARIZONA WATERSHED W-2					
ANTECEDENT CONDITIONS			RAINFALL			RUNOFF					
Date	Rainfall	Runoff	Date	Time	Intensity	Date	Time	Rate	Acc.		
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	Mo-Day	of Day	(cfs)	(inches)		
EVENT OF SEPTEMBER 8, 1970											
9- 8	BG 000028		9- 8	BG 000028		9- 8	1328	0.005	0.0		
	0.0	0.0		1315	0.0		1334	0.026	0.0		
				1320	2.6400		1343	0.026	0.0		
				1324	6.9000		1345	0.044	0.0		
				1333	1.5333		1358	0.044	0.0		
				1338	2.6400						
				1344	1.2000		1403	731.741	0.0011		
				1403	0.3158		1408	1084.844	0.0039		
							1411	1203.730	0.0058		
							1413	1109.766	0.0072		
							1414	1043.981	0.0078		
							1418	986.604	0.0102		
							1420	934.075	0.0114		
							1421	986.604	0.0119		
							1423	908.448	0.0131		
							1428	796.489	0.0156		
							1433	677.825	0.0177		
							1438	598.153	0.0196		
							1443	505.434	0.0212		
							1448	410.940	0.0225		
							1452	318.594	0.0234		
							1457	193.936	0.0242		
							1502	136.298	0.0247		
							1507	100.000	0.0250		
							1510	94.039	0.0252		
							1511	96.985	0.0253		
							1517	77.749	0.0256		
							1522	59.442	0.0258		
							1527	46.324	0.0260		
							1532	39.139	0.0261		
							1537	33.245	0.0262		
							1542	27.818	0.0263		
							1547	24.055	0.0264		
							1552	21.122	0.0265		
							1602	15.669	0.0266		
							1612	11.430	0.0267		

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.0000353.

1970			TONESTONE, ARIZONA WATERSHED W-2								
SELECTED RUNOFF EVENT											
ANTECEDENT CONDITIONS			RAINFALL			RUNOFF					
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.	
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)	
EVENT OF SEPTEMBER 8, 1970 (CONTINUED)											
							9- 8	1622	8.902	0.0268	
								1652	5.055	0.0269	
								1724	2.933	0.0270	
								1840	0.770	0.0271	

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.0000353.



EVENT OF SEPTEMBER 8, 1970
TONESTONE, ARIZONA WATERSHED W-2

TOMBSTONE, ARIZONA WATERSHED W-3

LOCATION: Cochise County; 1.3 miles north of Tombstone; tributary of Walnut Gulch; San Pedro River, Gila River, Colorado River Basin.

AREA: 2220.00 acres 3.47 sq. miles

MONTHLY PRECIPITATION AND RUNOFF (inches)														TOMBSTONE, ARIZONA WATERSHED W-3													
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual													
1970	P	0.0	0.27	1.29	0.20	0.04	0.00	2.25	4.12	2.05	0.05	0.0	0.40	10.66													
	Q	0.0	0.0	0.0	0.0	0.0	0.0	0.004	0.115	0.079	0.0	0.0	0.0	0.198													
STA AV	P	0.53	0.40	0.47	0.15	0.09	0.22	3.44	3.07	1.32	0.43	0.41	0.75	11.28													
	Q	0.0	0.0	0.0	0.0	0.0	0.0	0.023	0.096	0.029	0.0	0.0	0.0	0.148													
ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																											
		Maximum Discharge Date	Rate	1 Hour Date	Vol.	2 Hours Date	Vol.	6 Hours Date	Vol.	12 Hours Date	Vol.	1 Day Date	Vol.	2 Days Date	Vol.	8 Days Date	Vol.										
1970		9-8	0.131	9-8	0.072	9-8	0.079	9-8	0.080	9-8	0.080	8-9	0.083	8-8	0.085	8-8	0.114										
MAXIMUMS FOR PERIOD OF RECORD																											
		8-16	0.580	8-17	0.240	8-17	0.280	8-17	0.280	8-17	0.280	8-17	0.280	8-17	0.280	8-14	0.420										
		1958		1961		1961		1961		1961		1961		1961		1958											

NOTES: Watershed conditions: Vegetative cover; Desert shrubs (whitethorn, creosotebush, and tarbush) with a crown spread approximately 30% and grasses with basal area of approximately 9.8% cover occupy 55% of the area. Grasses (black grama, curly mesquite, tobosa) with basal area of 2.6% cover and shrub cover of 2% occupy the remaining 45% of the area. For topography, geologic and vegetation maps, see pages 63.1-3, 63.1-4 and 63.1-5 of Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1966, USDA Misc. Pub. No. 1226. Precipitation Data: Records began 1955. Monthly totals are Thiessen weighted averages of 13 gages, station averages are based on record period (1955-70). Runoff Data: Records began 1958, station averages are based on record period (1958-70). Temperature Data: See table of daily maximum and minimum values included for Watershed 63.001. For long-time precipitation records, see National Weather Service records at Tombstone, Arizona.

1970 DAILY PRECIPITATION (inches)														TOMBSTONE, ARIZONA WATERSHED W-3													
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec															
1	0.0	0.0	0.41	0.0	0.0	0.0	0.0	0.28	0.0	0.01	0.0	0.0	0.0														
2	0.0	0.0	0.20	0.0	0.0	0.0	0.01	0.21	0.01	0.04	0.0	0.0	0.0														
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.07E	0.20E	0.0	0.0	0.0	0.0														
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.03	0.69E	0.0	0.0	0.0	0.0														
5	0.0	0.0	0.40E	0.0	0.0	0.0	0.0	0.0	0.01	0.0	0.0	0.0	0.0														
6	0.0	0.0	0.22E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0														
7	0.0	0.0	0.0	0.0	0.0	0.0	0.12	0.01	0.0	0.0	0.0	0.0	0.0														
8	0.0	0.0	0.0	0.0	0.0	0.0	0.02	0.0	0.76E	0.0	0.0	0.0	0.0														
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.37	0.33	0.0	0.0	0.0	0.0														
10	0.0	0.0	0.00E	0.0	0.0	0.0	0.0	1.60E	0.0	0.0	0.0	0.0	0.0														
11	0.0	0.25E	0.05E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0														
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0														
13	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.0	0.0	0.0	0.0	0.0	0.0														
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.31E	0.0	0.0	0.0	0.0	0.0														
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.18	0.0	0.0	0.0	0.0	0.0														
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.41	0.0	0.0	0.0	0.0	0.0														
17	0.0	0.0	0.0	0.17E	0.0	0.0	0.0	0.23	0.0	0.0	0.0	0.0	0.0														
18	0.0	0.0	0.0	0.03	0.0	0.0	0.0	0.01	0.0	0.0	0.0	0.0	0.0														
19	0.0	0.0	0.0	0.0	0.0	0.0	0.12E	0.01	0.0	0.0	0.0	0.0	0.0														
20	0.0	0.01E	0.0	0.0	0.0	0.0	0.71	0.0	0.0	0.0	0.0	0.0	0.0														
21	0.0	0.01E	0.0	0.0	0.0	0.0	0.00	0.0	0.0	0.0	0.0	0.0	0.0														
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.11	0.0	0.0	0.0	0.0	0.0														
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.10	0.0	0.0	0.0	0.0	0.0														
24	0.0	0.0	0.0	0.0	0.0	0.0	0.42	0.0	0.0	0.0	0.0	0.0	0.0														
25	0.0	0.0	0.0	0.0	0.0	0.0	0.12E	0.0	0.0	0.0	0.0	0.0	0.0														
26	0.0	0.0	0.0	0.0	0.03	0.0	0.0	0.21	0.0	0.0	0.0	0.0	0.0														
27	0.0	0.0	0.0	0.0	0.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.40														
28	0.0	0.0	0.0	0.0	0.0	0.0	0.25	0.0	0.0	0.0	0.0	0.0	0.0														
29	0.0	0.0	0.0	0.0	0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0.0														
30	0.0	0.0	0.0	0.0	0.0	0.0	0.22	0.0	0.05	0.0	0.0	0.0	0.0														
31	0.0	0.0	0.0	0.0	0.0	0.0	0.26	0.0	0.0	0.0	0.0	0.0	0.0														
TOTAL	0.0	0.27	1.29	0.20	0.04	0.00	2.25	4.12	2.05	0.05	0.0	0.40															
STA AV	0.53	0.40	0.47	0.15	0.09	0.22	3.44	3.07	1.32	0.43	0.41	0.75															

NOTES: Data are Thiessen weighted averages from 13 rain gages. STA AV are based on record period (1955-70).

1970 MEAN DAILY DISCHARGE (cfs) TOMBSTONE, ARIZONA WATERSHED W-3												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.003	0.0	0.0	0.0	0.0
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.411E	0.0	0.0	0.0
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.203	0.0	0.0	0.0	0.0
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.712E	0.0	0.0	0.0	0.0
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	0.0	0.0	0.0	0.0	0.0	0.0	0.364	0.236E	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.529E	0.0	0.0	0.0	0.0
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MEAN	0.0	0.0	0.0	0.0	0.0	0.0	0.0118	0.3446	0.2470	0.0	0.0	0.0
INCHES	0.0	0.0	0.0	0.0	0.0	0.0	0.004	0.115	0.079	0.0	0.0	0.0
STA AV	0.0	0.0	0.0	0.0	0.0	0.0	0.023	0.096	0.029	0.0	0.0	0.0

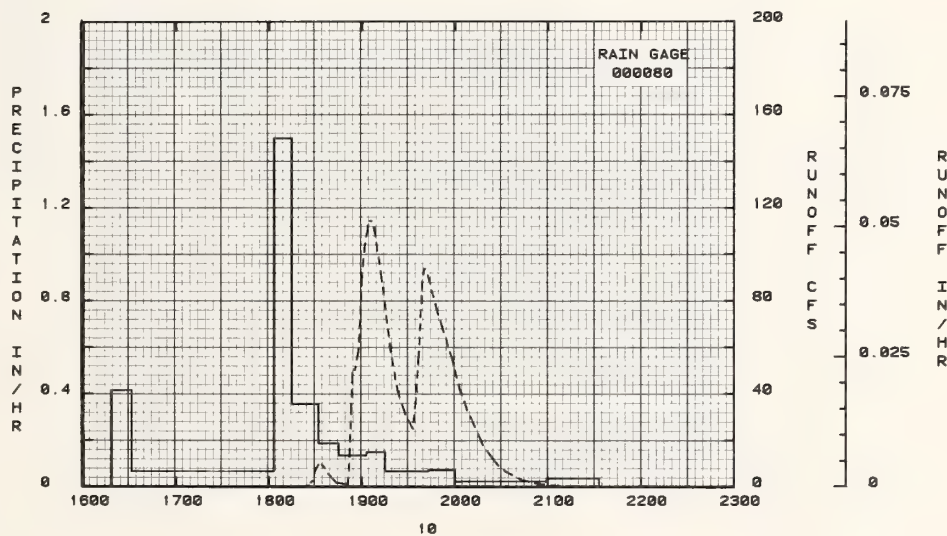
NOTES: To convert mean daily discharge in CFS to IN/DAY, multiply by 0.010722. STA AV based on record period (1958-70).

1970 SELECTED RUNOFF EVENT TOMBSTONE, ARIZONA WATERSHED W-3											
ANTECEDENT CONDITIONS			RAINFALL			RUNOFF					
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.	
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)	
EVENT OF AUGUST 10, 1970											
RG 000080			RG 000080								
8-10	0.41	0.041	8-10	1618	0.0	0.0	8-10	1817	0.0	0.0	
				1631	0.4154	0.09		1818	0.025	0.0	
				1803	0.0652	0.19		1821	0.077	0.0	
				1815	1.4999	0.49		1823	0.115	0.0	
				1832	0.3530	0.59		1825	0.161	0.0	
WATERSHED CONDITIONS:											
Vegetative Cover: Desert				1845	0.1846	0.63		1826	0.437	0.0	
shrubs (whitethorn, creosote-				1903	0.1333	0.67		1827	1.658	0.0	
bush, and tarbrush) with				1915	0.1500	0.70		1828	2.507	0.0	
a crown spread approximately				1943	0.0643	0.73		1830	7.103	0.0001	
30% and grasses with basal				2000	0.0706	0.75		1832	9.400	0.0002	
area of approximately 0.8%											
cover, occupy 55% of the area.				2059	0.0203	0.77		1834	9.400	0.0003	
Grasses (black grama, curly				2133	0.0353	0.79		1836	7.979	0.0004	
mesquite, tobosa) with a								1838	5.520	0.0005	
basal area of 2.6% cover								1843	1.658	0.0006	
and shrub cover of 2% occupy								1844	1.476	0.0006	
the remaining 45% of the											
area.								1848	1.147	0.0006	
								1849	1.000	0.0006	
								1850	0.867	0.0006	
								1851	0.867	0.0006	
								1852	13.230	0.0006	
								1853	32.830	0.0008	
								1854	49.220	0.0011	
								1855	50.443	0.0014	
								1856	51.682	0.0018	
								1858	59.468	0.0027	
								1900	91.856	0.0039	
								1902	104.640	0.0053	
								1904	112.367	0.0070	
								1905	114.347	0.0078	
								1906	114.347	0.0086	
								1908	110.406	0.0104	
								1913	88.375	0.0140	
								1918	60.824	0.0167	
								1923	41.119	0.0187	
								1928	30.917	0.0200	

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.000447.

1970	SELECTED RUNOFF EVENT			TOMBSTONE, ARIZONA WATERSHED W-3						
ANTECEDENT CONDITIONS			RAINFALL			RUNOFF				
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)
EVENT OF AUGUST 10, 1970 (CONTINUED)										
				8-10			1933		24.715	0.0210
							1935		37.890	0.0215
							1937		58.129	0.0222
							1939		88.375	0.0234
							1940		93.626	0.0240
							1941		93.626	0.0247
							1943		90.106	0.0261
							1948		76.862	0.0292
							1953		66.418	0.0320
							1958		55.500	0.0342
							2003		42.227	0.0360
							2008		32.830	0.0374
							2013		25.555	0.0385
							2018		17.805	0.0393
							2023		13.230	0.0399
							2028		8.911	0.0403
							2033		6.284	0.0406
							2043		2.750	0.0409
							2053		1.147	0.0410
							2103		0.354	0.0411
							2119		0.0	0.0411

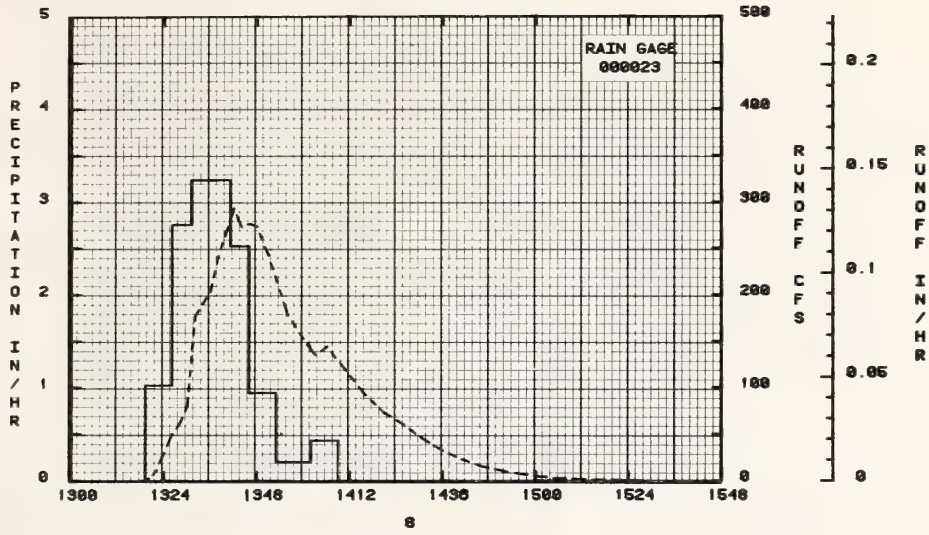
NOTES: To convert runoff in CFS to IN/HR, multiply by 0.000447.



EVENT OF AUGUST 10, 1970
TOMBSTONE, ARIZONA WATERSHED W-3

1970 SELECTED RUNOFF EVENT			TOMBSTONE, ARIZONA WATERSHED W-3							
ANTECEDENT CONDITIONS			RAINFALL				RUNOFF			
Date Mo-Day	Rainfall (inches)	Runoff (inches)	Date Mo-Day	Time of Day	Intensity (in/hr)	Acc. (inches)	Date Mo-Day	Time of Day	Rate (cfs)	Acc. (inches)
EVENT OF SEPTEMBER 8, 1970										
9- 8	RG 000023 0.0	0.0	9- 8	1319	0.0	0.0	9- 8	1317	0.0	0.0
				1326	1.0286	0.12		1318	0.530	0.0
				1331	2.7600	0.35		1319	0.745	0.0
				1336	3.2400	0.62		1320	2.276	0.0
				1341	3.2400	0.89		1321	5.895	0.0
WATERSHED CONDITIONS:										
Vegetative cover: Desert				1346	2.5200	1.10	1322	11.499	0.0001	
shrubs (whitethorn, creosote-				1353	0.9429	1.21	1323	21.511	0.0002	
bush, and tarbrush) with				1402	0.2000	1.24	1324	29.985	0.0004	
a crown spread approximately				1409	0.4286	1.29	1325	40.026	0.0006	
30% and grasses with basal							1326	50.443	0.0009	
area of approximately 0.8%										
cover, occupy 55% of the area.							1328	60.824	0.0018	
Grasses (black grama, curly							1330	81.638	0.0029	
mesquite, tobosa) with a							1332	177.827	0.0047	
basal area of 2.6% cover							1334	190.832	0.0076	
and shrub cover of 2% occupy							1336	204.354	0.0104	
the remaining 45% of the										
area.							1338	241.965	0.0139	
							1340	266.895	0.0175	
							1342	293.205	0.0219	
							1344	273.342	0.0259	
							1346	276.596	0.0302	
							1348	273.342	0.0340	
							1351	241.965	0.0398	
							1356	177.827	0.0475	
							1401	146.404	0.0537	
							1403	135.224	0.0557	
							1406	144.128	0.0589	
							1411	118.365	0.0637	
							1416	91.856	0.0677	
							1421	72.283	0.0707	
							1426	59.468	0.0731	
							1431	44.493	0.0751	
							1436	31.866	0.0765	
							1441	22.289	0.0775	
							1446	15.098	0.0782	
							1451	10.420	0.0787	
							1456	6.686	0.0790	
							1501	3.849	0.0792	
							1506	2.058	0.0793	
							1511	0.867	0.0794	
							1516	0.354	0.0794	
							1521	0.077	0.0794	
							1527	0.0	0.0794	

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.000447.



EVENT OF SEPTEMBER 8, 1970
TOMBSTONE, ARIZONA WATERSHED W-3

TOMBSTONE, ARIZONA W-4

LOCATION: Cochise County, Arizona; 2 miles north of Tombstone; Walnut Gulch, San Pedro River, Gila River, Colorado River Basin.

AREA: 560.00 acres

MONTHLY PRECIPITATION AND RUNOFF (inches)										TOMBSTONE, ARIZONA W-4					
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual	
1970	P	0.0	0.28	1.33	0.19	0.06	0.0	1.63	4.21	2.23	0.05	0.0	0.42	10.39	
	Q	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.033	0.190	0.0	0.0	0.0	0.223	
STA AV	P	0.49	0.39	0.49	0.15	0.09	0.23	3.34	3.11	1.33	0.42	0.40	0.73	11.16	
	Q	0.0	0.0	0.0	0.0	0.0	0.0	0.377	0.116	0.029	0.0	0.0	0.0	0.522	
ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS															
		Maximum Discharge		1 Hour		2 Hours		Maximum Volume for Selected Time Interval							
		Date	Rate	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.
1970		9- 8	0.360	9- 8	0.185	9- 8	0.190	9- 8	0.190	9- 8	0.190	9- 7	0.190	9- 6	0.190
														8-31	0.190
MAXIMUMS FOR PERIOD OF RECORD															
		7-19	2.250	7-19	0.980	7-19	1.100	7-19	1.100	7-19	1.100	7-19	1.630	7-19	1.630
		1955		1955		1955		1955		1955		1955		1955	
															4.370

NOTES: Watershed conditions: Vegetative cover: 100% dominated by desert shrubs (whitethorn, creosotebush, and tarbush) with a crown spread of approximately 38% and an understory of grasses with approximately 0.6% basal cover. For topography, geological, and vegetative maps, see pages 63.1-3, 63.1-4 and 63.1-5 respectively of Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1966, USDA Misc. Pub. 1226. Precipitation Data: Record began July 1954. Monthly totals are Thiessen weighted averages of three rain gages, station averages are based on record period (1955-70). Runoff Data: Records began January 1955, station averages based on 14 yr (1955-58) and (1961-70). Temperature Data: See table of daily maximum and minimum values included for Watershed 63.001. For long-time precipitation records, see National Weather Service records at Tombstone, Arizona.

1970 DAILY PRECIPITATION (inches)													TOMBSTONE, ARIZONA W-4	
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
1	0.0	0.0	0.43	0.0	0.0	0.0	0.0	0.17	0.0	0.0	0.0	0.0		
2	0.0	0.0	0.19	0.0	0.0	0.0	0.01	0.24	0.0	0.05	0.0	0.0		
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.05	0.22E	0.0	0.0	0.0		
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.34	0.72E	0.0	0.0	0.0		
5	0.0	0.0	0.43E	0.0	0.0	0.0	0.0	0.0	0.00	0.0	0.0	0.0		
6	0.0	0.0	0.24E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
7	0.0	0.0	0.0	0.0	0.0	0.0	0.17	0.0	0.0	0.0	0.0	0.0		
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.89	0.0	0.0	0.0		
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.18	0.31	0.0	0.0	0.0		
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.56	0.0	0.0	0.0	0.0		
11	0.0	0.27	0.05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
13	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.0	0.0	0.0	0.0	0.0		
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.43E	0.0	0.0	0.0	0.0		
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.26	0.0	0.0	0.0	0.0		
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.55	0.0	0.0	0.0	0.0		
17	0.0	0.0	0.0	0.18	0.0	0.0	0.0	0.21	0.0	0.0	0.0	0.0		
18	0.0	0.0	0.0	0.01	0.0	0.0	0.0	0.02	0.0	0.0	0.0	0.0		
19	0.0	0.0	0.0	0.0	0.0	0.0	0.11	0.0	0.0	0.0	0.0	0.0		
20	0.0	0.01	0.0	0.0	0.0	0.0	0.55	0.0	0.0	0.0	0.0	0.0		
21	0.0	0.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.12	0.0	0.0	0.0	0.0		
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.13	0.0	0.0	0.0	0.0		
24	0.0	0.0	0.0	0.0	0.0	0.0	0.16	0.0	0.0	0.0	0.0	0.0		
25	0.0	0.0	0.0	0.0	0.0	0.0	0.02	0.0	0.0	0.0	0.0	0.0		
26	0.0	0.0	0.0	0.0	0.06	0.0	0.0	0.25	0.0	0.0	0.0	0.0		
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
28	0.0	0.0	0.0	0.0	0.0	0.0	0.15	0.0	0.0	0.0	0.0	0.0		
29	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.0	0.0	0.0	0.0	0.0		
30	0.0	0.0	0.0	0.0	0.0	0.0	0.17	0.0	0.08	0.0	0.0	0.0		
31	0.0	0.0	0.0	0.0	0.0	0.0	0.28	0.0	0.0	0.0	0.0	0.0		
TOTAL	0.0	0.28	1.33	0.19	0.06	0.0	1.63	4.21	2.23	0.05	0.0	0.42		
STA AV	0.49	0.39	0.49	0.15	0.09	0.23	3.34	3.11	1.33	0.42	0.40	0.73		

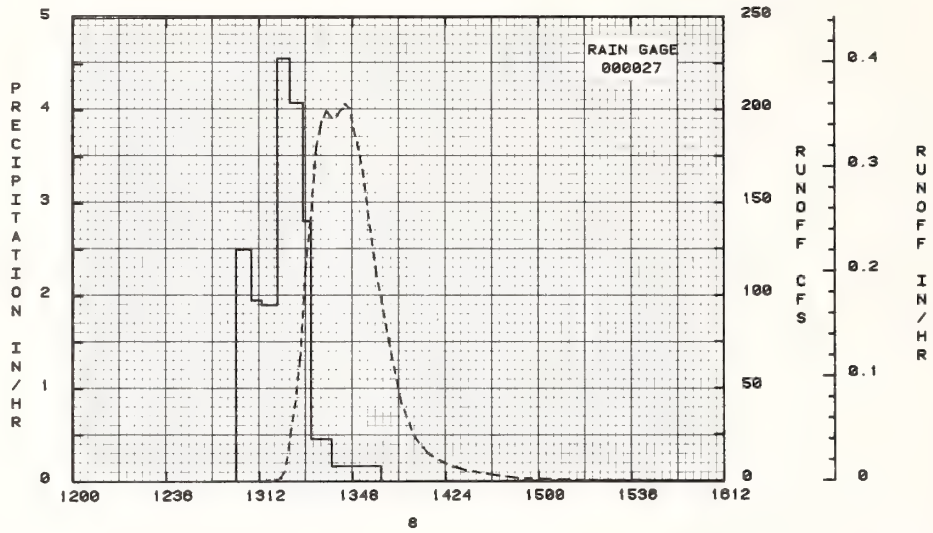
NOTES: Data are Thiessen weighted averages of values from three gages. STA AV are for record period (1955-70).

1970 MEAN DAILY DISCHARGE (cfs) TOMBSTONE, ARIZONA W-4												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.466	0.0	0.0	0.0
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.763	0.0	0.0	0.0	0.0
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0062	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0 T	0.0	0.0	0.0	0.0
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MEAN	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0248	0.1489	0.0	0.0	0.0
INCHES	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.033	0.190	0.0	0.0	0.0
STA AV	0.0	0.0	0.0	0.0	0.0	0.0	0.377	0.116	0.029	0.0	0.0	0.0

NOTES: To convert mean daily discharge in CFS to IN/DAY, multiply by 0.042503. STA AV based on record period (1955-58) and (1961-70).

1970 SELECTED RUNOFF EVENT						TOMBSTONE, ARIZONA W-4					
ANTECEDENT CONDITIONS			RAINFALL			RUNOFF					
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.	
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)	
EVENT OF SEPTEMBER 8, 1970											
9- 8	RG 000027			RG 000027							
	0.0	C.0	9- 8	1303	0.0	0.0	9- 8	1314	0.0	0.0	
				1309	2.5000	0.25		1316	0.692	0.0	
				1313	1.9500	0.38		1318	0.831	0.0	
				1319	1.9000	0.57		1319	0.584	0.0	
				1324	4.5600	0.95		1320	1.546	0.0	
WATERSHED CONDITIONS:											
100% of area dominated by											
desert shrubs (whitethorn,											
creosotebush and tarbush)											
with a crown spread of											
approximately 33% and an											
understory of grasses with											
approximately 0.6% basal											
cover.											
				1329	4.0800	1.29		1322	5.619	0.0002	
				1332	2.8000	1.43		1324	24.867	0.0011	
				1340	0.4500	1.49		1326	43.484	0.0030	
				1359	0.1579	1.54		1328	69.370	0.0065	
								1330	118.043	0.0123	
								1332	142.483	0.0195	
								1334	179.651	0.0295	
								1336	193.258	0.0398	
								1338	199.580	0.0520	
								1340	195.776	0.0629	
								1342	197.041	0.0751	
								1344	200.855	0.0861	
								1345	203.415	0.0931	
								1347	200.655	0.1043	
								1352	167.648	0.1311	
								1357	113.992	0.1525	
								1402	76.309	0.1663	
								1407	41.582	0.1749	
								1412	23.832	0.1799	
								1417	15.026	0.1827	
								1422	10.665	0.1846	
								1427	7.467	0.1860	
								1432	5.619	0.1870	
								1442	3.122	0.1883	
								1452	1.342	0.1889	
								1502	0.831	0.1892	
								1512	0.359	0.1894	
								1537	0.029	0.1895	
								1552	0.0	0.1895	

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.001771.



EVENT OF SEPTEMBER 8, 1970

TOMBSTONE, ARIZONA W-4

TOMBSTONE, ARIZONA W-6

LOCATION: Cochise County; 3/4 mile north of Tombstone; Walnut Gulch, San Pedro River, Gila River, Colorado River Basin.

AREA: 23500.00 acres 36.70 sq. miles

MONTHLY PRECIPITATION AND RUNOFF (inches)														TOMBSTONE, ARIZONA W-6			
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual			
1970	P	0.0	0.33	1.30	0.24	0.02	0.06	3.18	3.89	1.42	0.04	0.0	0.40	10.87	0.197		
	Q	0.0	0.0	0.0	0.0	0.0	0.0	0.067	0.122	0.008	0.0	0.0	0.0				
STA AV	P	0.35	0.76	0.91	0.19	0.15	0.03	3.27	3.78	1.01	0.08	0.29	0.51	11.35	0.126		
	Q	0.0	0.0	0.0	0.0	0.0	0.0	0.057	0.061	0.008	0.0	0.0	0.0				
ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																	
		Maximum Discharge		1 Hour		2 Hours		Maximum Volume for Selected Time Interval		6 Hours		12 Hours		2 Days		8 Days	
		Date	Rate	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.
1970		7-20	0.047	7-20	0.036	7-20	0.043	7-24	0.045	7-24	0.045	8-16	0.063	8-16	0.065	8-10	0.092
MAXIMUMS FOR PERIOD OF RECORD																	
		7-26	0.100	7-28	0.080	7-28	0.100	7-28	0.110	7-28	0.110	7-28	0.110	7-28	0.120	8-19	0.180
		1966		1966		1966		1966		1966		1966		1966		1963	

NOTES: Watershed conditions: Vegetative cover: Oak woodland and desert shrubs (whitethorn, creosotebush, tarbush, matornia) occupy approximately 45% of area, with a crown spread of 25% cover. The remaining 55% of the area supports a grass cover (black grama, curly mesquite, tobosa, blue grama, and sideoats grama) with a basal area of 2.5% cover and a shrub cover of approximately 6% crown spread. For topographic, geologic and vegetative maps, see pages 63.1-3, 63.1-4, and 63.1-5, respectively, of Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1966, USDA Misc. Pub. 1226. Precipitation Data: Records began 1962. Monthly totals are Thiessen weighted averages of values from 57 gages, station averages are based on 1968-1970 record period. Runoff Data: Records began 1962, station averages based on 4 yr of data (1966, 1968-70). Temperature Data: See table of daily maximum and minimum values included for Watershed 63.001. For long-time precipitation records, see National Weather Service records at Tombstone, Arizona.

1970 DAILY PRECIPITATION (inches)													TOMBSTONE, ARIZONA W-6	
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
1	0.0	0.0	0.32E	0.0	0.0	0.0	0.01	0.63E	0.0	0.01E	0.0	0.0		
2	0.0	0.0	0.32E	0.0	0.0	0.0	0.01	0.24E	0.01E	0.03E	0.0	0.0		
3	0.6	0.0	0.0	0.0	0.0	0.0	0.00	0.06E	0.20E	0.0	0.0	0.0		
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.63E	0.0	0.0	0.0		
5	0.0	0.0	0.35E	0.0	0.0	0.0	0.0	0.01	0.02E	0.0	0.0	0.0		
6	0.0	0.0	0.22E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
7	0.0	0.0	0.0	0.0	0.0	0.0	0.13	0.07	0.0	0.0	0.0	0.0		
8	0.0	0.0	0.0	0.0	0.0	0.0	0.02E	0.0	0.16E	0.0	0.0	0.0		
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.28	0.35	0.0	0.0	0.0		
10	0.0	0.0	0.02E	0.0	0.0	0.0	0.0	0.92E	0.00	0.0	0.0	0.0		
11	0.0	0.30E	0.08E	0.0	0.0	0.0	0.0	0.02	0.0	0.0	0.0	0.0		
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.0	0.0	0.0		
13	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.0	0.0	0.0	0.0	0.0		
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.19E	0.0	0.0	0.0	0.00		
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.06E	0.00	0.0	0.0	0.0		
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.57E	0.0	0.0	0.0	0.0		
17	0.0	0.0	0.0	0.16E	0.0	0.0	0.00	0.41E	0.0	0.0	0.0	0.0		
18	0.0	0.0	0.0	0.08E	0.0	0.0	0.02E	0.00	0.0	0.0	0.0	0.00		
19	0.0	0.0	0.0	0.0	0.0	0.0	0.09E	0.05E	0.0	0.0	0.0	0.0		
20	0.0	0.01E	0.0	0.0	0.0	0.0	1.02E	0.0	0.0	0.0	0.0	0.0		
21	0.0	0.01E	0.0	0.0	0.0	0.0	0.01E	0.00	0.0	0.0	0.0	0.0		
22	0.0	0.0	0.0	0.0	0.0	0.00	0.0	0.11	0.0	0.0	0.0	0.0		
23	0.0	0.01E	0.0	0.0	0.0	0.0	0.0	0.17E	0.0	0.0	0.0	0.0		
24	0.0	0.0	0.0	0.0	0.0	0.0	0.44E	0.0	0.0	0.0	0.0	0.0		
25	0.0	0.0	0.0	0.0	0.01	0.0	0.09E	0.0	0.0	0.0	0.0	0.0		
26	0.0	0.0	0.0	0.0	0.00	0.0	0.0	0.08	0.0	0.0	0.0	0.0		
27	0.0	0.0	0.0	0.0	0.00E	0.0	0.02	0.0	0.0	0.0	0.0	0.0		0.39
28	0.0	0.0	0.0	0.0	0.0	0.02	0.54E	0.0	0.0	0.0	0.0	0.0		
29	0.0	0.0	0.0	0.0	0.0	0.03	0.0	0.0	0.0	0.0	0.0	0.0		
30	0.0	0.0	0.0	0.0	0.0	0.0	0.21E	0.0	0.05E	0.0	0.0	0.0		
31	0.0	0.0	0.0	0.0	0.0	0.0	0.57E	0.0	0.0	0.0	0.0	0.0		
TOTAL	0.0	0.33	1.30	0.24	0.02	0.06	3.18	3.89	1.42	0.04	0.0	0.40		
STA AV	0.35	0.76	0.91	0.19	0.15	0.03	3.27	3.78	1.01	0.08	0.29	0.51		

NOTES: Daily precipitation are Thiessen weighted averages of values from 57 gages. STA AV based on 3 yr only (1968-70).

1970 MEAN DAILY DISCHARGE (cfs) TOMBSTONE, ARIZONA W-6												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	15.936E	0.0	0.0	0.0	0.0
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.371E	0.0	0.0	0.0	0.0
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.418	0.0	0.0	0.0	0.0
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.024	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.629	0.0	0.0	0.0
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10.336E	0.0	0.0	0.0	0.0
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	27.078E	0.0	0.0	0.0	0.0
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.192	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	33.999	0.0	0.0	0.0	0.0
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	29.978E	0.0	0.0	0.0	0.0
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.040E	0.0	0.0	0.0	0.0
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.0	0.0	0.0	0.0	44.726E	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	0.0	0.013E	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	0.0	0.0	0.0	0.0	0.0	0.0	0.533	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	0.0	0.0	0.0	0.0	0.0	0.0	0.125	0.0	0.0	0.0	0.0	0.0
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	0.0	0.0	0.0	0.0	0.0	0.0	20.434E	0.0	0.0	0.0	0.0	0.0
MEAN	0.0	0.0	0.0	0.0	0.0	0.0	2.1235	3.8821	0.2684	0.0	0.0	0.0
INCHES	0.0	0.0	0.0	0.0	0.0	0.0	0.067	0.122	0.008	0.0	0.0	0.0
STA AV	0.0	0.0	0.0	0.0	0.0	0.0	0.057	0.061	0.008	0.0	0.0	0.0

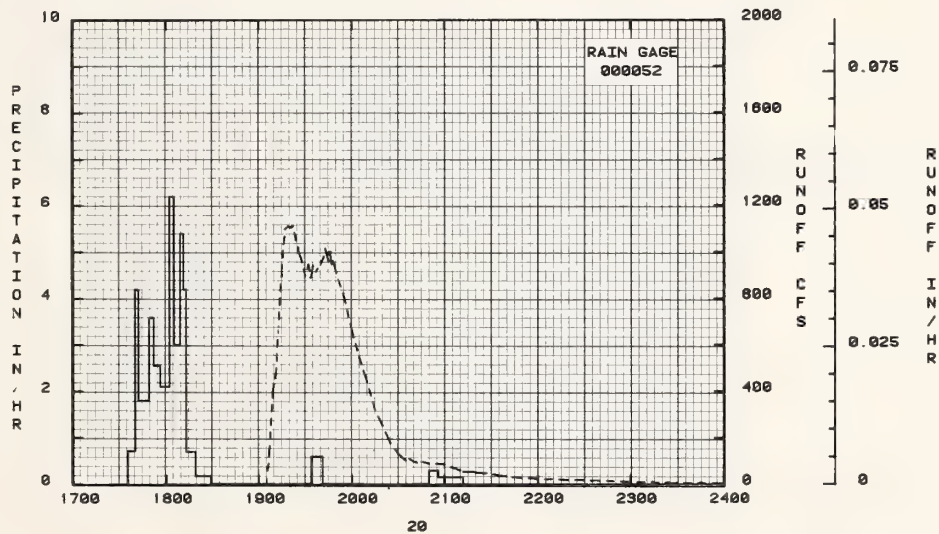
NOTES: To convert mean daily discharge in CFS to IN/DAY, multiply by 0.001013. STA AV based on record period (1966, 1968-70).

1970 SELECTED RUNOFF EVENT						TOMBSTONE, ARIZONA W-6					
ANTECEDENT CONDITIONS			RAINFALL			RUNOFF					
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.	
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)	
EVENT OF JULY 20, 1970											
RG 000052											
7-20	0.0	0.0	7-20	1735	0.0	0.0	7-20	1905	0.0	0.0	
				1749	0.7200	0.06		1907	164.988	0.0001	
				1742	4.1991	0.20		1909	400.000	0.0005	
				1749	1.8000	0.41		1911	472.451	0.0011	
				1752	3.6009	0.59		1913	713.425	0.0020	
WATERSHED CONDITIONS:											
Vegetative Cover: Oak				1756	2.5500	0.76	1915	948.802	0.0032		
woodland and desert shrubs				1802	2.0999	0.97	1917	1100.000	0.0046		
(whitethorn, creosotebush,				1805	6.1996	1.28	1919	1113.845	0.0062		
tarbush, mormonia) occupy				1809	3.0000	1.48	1920	1106.913	0.0069		
approximately 45% of the				1811	5.4013	1.66	1922	1113.845	0.0084		
area, with a crown spread											
of 25% cover. The remaining				1813	4.1991	1.80	1924	1050.708	0.0100		
55% of the area supports a				1819	0.7000	1.87	1926	995.727	0.0113		
grass cover (black grama,				1829	0.1800	1.90	1928	955.437	0.0127		
curly mesquite, tobosa, blue				1934	0.0392	1.91	1930	896.531	0.0141		
grama, and sidecoats grama)				1941	0.6001	1.98	1932	948.802	0.0153		
with basal area of 2.5% cover											
and shrub cover of 6% crown				2050	0.0087	1.99	1934	890.100	0.0167		
spread.				2056	0.3000	2.02	1935	942.189	0.0173		
			2112	0.1500	2.06		1937	915.965	0.0185		
							1938	929.031	0.0193		
							1940	948.802	0.0205		
							1942	982.208	0.0219		
							1943	1016.176	0.0226		
							1945	962.096	0.0241		
							1946	1002.521	0.0247		
							1947	948.602	0.0253		
							1948	962.096	0.0259		
							1950	909.465	0.0273		
							1955	808.542	0.0303		
							2000	662.478	0.0330		
							2005	545.717	0.0351		
							2010	440.031	0.0368		
							2015	319.455	0.0382		
							2020	251.552	0.0392		
							2025	176.656	0.0399		
							2030	129.839	0.0405		

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.000042.

1970			TOMBSTONE, ARIZONA W-6							
SELECTED RUNOFF EVENT			RAINFALL				RUNOFF			
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)
EVENT OF JULY 20, 1970 (CONTINUED)										
				7-20			2035		101.152	0.0409
							2037		110.314	0.0410
							2040		96.721	0.0412
							2041		94.543	0.0413
							2042		94.543	0.0414
							2045		96.721	0.0416
							2050		88.159	0.0419
							2055		88.159	0.0422
							2100		84.028	0.0425
							2105		71.132	0.0428
							2110		58.342	0.0430
							2112		52.626	0.0431
							2119		52.626	0.0434
							2120		49.929	0.0434
							2127		47.334	0.0436
							2135		37.941	0.0438
							2145		28.602	0.0440
							2200		22.259	0.0443
							2215		18.945	0.0445
							2230		15.976	0.0447
							2240		14.180	0.0448
							2300		8.485	0.0450
							2330		3.490	0.0451
							2400		1.170	0.0451

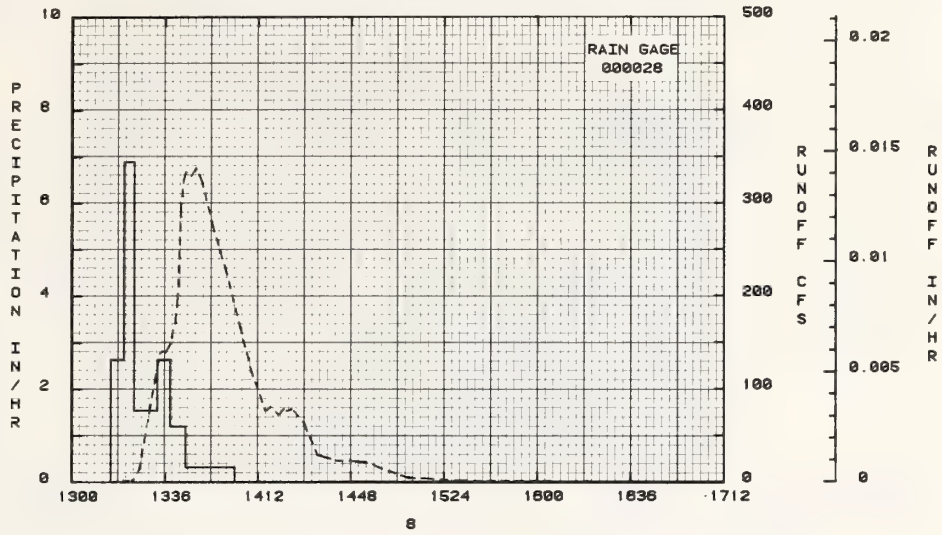
NOTES: To convert runoff in CFS to IN/HR, multiply by 0.000042.



EVENT OF JULY 20, 1970
TOMBSTONE, ARIZONA W-6

1970 SELECTED RUNOFF EVENT			TOMBSTONE, ARIZONA W-6							
ANTECEDENT CONDITIONS			RAINFALL				RUNOFF			
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)
EVENT OF SEPTEMBER 8, 1970										
RG 000028			RG 000028							
9- 8	0.0	0.0	9- 8	1315	0.0	0.0	9- 8	1316	0.0	0.0
				1320	2.6400	0.22		1318	0.278	0.0
				1324	6.9000	0.68		1320	1.354	0.0
				1333	1.5333	0.91		1322	1.769	0.0
				1338	2.6400	1.13		1323	2.000	0.0
WATERSHED CONDITIONS:										
Vegetative Cover: Oak				1344	1.2000	1.25	1324	3.213	0.0	
woodland and desert shrubs				1403	0.3158	1.35	1326	13.114	0.0	
(whitethorn, creosotebush,							1328	44.596	0.0	
tarbush, mormonia) occupy							1330	76.366	0.0001	
approximately 45% of the							1332	108.852	0.0002	
area, with a crown spread										
of 25% cover. The remaining							1334	138.959	0.0004	
55% of the area supports a							1335	140.928	0.0005	
grass cover (black grama,							1336	138.959	0.0006	
curly mesquite, tobosa, blue							1338	148.904	0.0008	
grama, and sideoats grama)							1340	173.770	0.0010	
with a basal area of 2.5%										
cover and shrub cover of 6%							1341	203.210	0.0011	
crown spread.							1342	292.757	0.0013	
							1343	325.260	0.0015	
							1344	333.680	0.0017	
							1346	329.456	0.0022	
							1348	337.937	0.0026	
							1350	325.260	0.0031	
							1355	269.615	0.0041	
							1400	223.062	0.0050	
							1405	167.424	0.0057	
							1410	114.293	0.0062	
							1415	76.366	0.0065	
							1417	80.807	0.0066	
							1420	72.066	0.0068	
							1422	78.569	0.0069	
							1423	76.366	0.0070	
							1425	78.569	0.0071	
							1426	76.366	0.0072	
							1430	61.925	0.0074	
							1435	28.895	0.0076	
							1440	24.710	0.0077	
							1442	22.758	0.0077	
							1450	21.816	0.0078	
							1454	20.896	0.0079	
							1500	13.982	0.0080	
							1510	4.393	0.0081	
							1520	2.693	0.0081	
							1530	1.000	0.0081	
							1638	0.0	0.0081	

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.000042.



EVENT OF SEPTEMBER 8, 1970
TOMBSTONE, ARIZONA W-6

TOMBSTONE, ARIZONA W-8

LOCATION: Cochise County; 1-1/2 miles northeast of Tombstone; Walnut Gulch, San Pedro River, Gila River, Colorado River Basin.

AREA: 3830.00 acres 5.98 sq. miles

MONTHLY PRECIPITATION AND RUNOFF (inches)														TOMBSTONE, ARIZONA W-8											
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual											
1970	P	0.0	0.29	1.14	0.22	0.00	0.03	3.30	3.98	1.44	0.05	0.0	0.41	10.86											
	Q	0.0	0.0	0.0	0.0	0.0	0.0	0.075	0.253	0.014	0.0	0.0	0.0	0.342											
STA AV	P	0.33	0.82	0.83	0.17	0.13	0.02	2.55	3.97	1.15	0.09	0.30	0.49	10.85											
	Q	0.0	0.0	0.0	0.0	0.0	0.0	0.050	0.111	0.014	0.0	0.0	0.0	0.176											
ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																									
		Maximum Discharge		1 Hour		2 Hours		6 Hours		12 Hours		1 Day		2 Days		8 Days									
		Date	Rate	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.								
1970		8-9	0.193	8-9	0.073	8-9	0.076	8-9	0.076	8-8	0.076	8-9	0.133	8-8	0.198	8-8	0.245								
MAXIMUMS FOR PERIOD OF RECORD																									
		7-22	1.110	7-22	0.310	7-22	0.320	7-22	0.340	7-22	0.340	7-22	0.340	7-22	0.340	7-22	0.340								
		1964		1964		1964		1964		1964		1964		1964		1964									

NOTES: Watershed conditions: Vegetative cover: approximately 33% of area is dominated by desert shrubs (white-thorn, creosotebush, tarbush) with a crown spread of approximately 30% and an understory of grasses with less than 1% basal area. The remaining 67% of the area is dominated by grasses (black grama, curly mesquite, sideoats grama) with a basal area of about 2.5% interspersed by desert shrubs with a crown spread of 5%. For topographic, geologic, and vegetation maps, see pages 63.1-3, 63.1-4 and 63.1-5, respectively, of Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1966, USDA Misc. Pub. 1226. Precipitation Data: Records began 1963. Monthly totals are Thiessen weighted averages of 17 gages, station averages are based on 1968-70 data. Runoff Data: Records began 1963, station averages are based on 1966, 1968-70 data. Temperature Data: See table of daily maximum and minimum values included for Watershed 63.001. For long-time precipitation records, see National Weather Service records at Tombstone, Arizona.

1970 DAILY PRECIPITATION (inches)														TOMBSTONE, ARIZONA W-8											
	Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec												
	1	0.0	0.0	0.35E	0.0	0.0	0.0	0.00	0.54	0.0	0.02	0.0	0.0												
	2	0.0	0.0	0.28E	0.0	0.0	0.0	0.03	0.14	0.02E	0.03	0.0	0.0												
	3	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.08E	0.20E	0.0	0.0	0.0												
	4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.01	0.61E	0.0	0.0	0.0												
	5	0.0	0.0	0.31E	0.0	0.0	0.0	0.0	0.00	0.02E	0.0	0.0	0.0												
	6	0.0	0.0	0.17E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0												
	7	0.0	0.0	0.0	0.0	0.0	0.0	0.08	0.01	0.0	0.0	0.0	0.0												
	8	0.0	0.0	0.0	0.0	0.0	0.0	0.03	0.0	0.21E	0.0	0.0	0.0												
	9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.67	0.37	0.0	0.0	0.0												
	10	0.0	0.0	0.02E	0.0	0.0	0.0	0.0	1.36E	0.0	0.0	0.0	0.0												
	11	0.0	0.28	0.05E	0.0	0.0	0.0	0.0	0.01	0.0	0.0	0.0	0.0												
	12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0												
	13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0												
	14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.10	0.0	0.0	0.0	0.0												
	15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.13	0.0	0.0	0.0	0.0												
	16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.33E	0.0	0.0	0.0	0.0												
	17	0.0	0.0	0.0	0.16E	0.0	0.0	0.0	0.30E	0.0	0.0	0.0	0.0												
	18	0.0	0.0	0.0	0.07	0.0	0.0	0.00	0.0	0.0	0.0	0.0	0.01												
	19	0.0	0.0	0.0	0.0	0.0	0.0	0.07E	0.00	0.0	0.0	0.0	0.0												
	20	0.0	0.01E	0.0	0.0	0.0	0.0	1.25	0.0	0.0	0.0	0.0	0.0												
	21	0.0	0.01E	0.0	0.0	0.0	0.0	0.00	0.0	0.0	0.0	0.0	0.0												
	22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.09	0.0	0.0	0.0	0.0												
	23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.08	0.0	0.0	0.0	0.0												
	24	0.0	0.0	0.0	0.0	0.0	0.0	0.54E	0.0	0.0	0.0	0.0	0.0												
	25	0.0	0.0	0.0	0.0	0.0	0.0	0.18E	0.0	0.0	0.0	0.0	0.0												
	26	0.0	0.0	0.0	0.0	0.00	0.0	0.0	0.14	0.0	0.0	0.0	0.0												
	27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0												
	28	0.0	0.0	0.0	0.0	0.0	0.01	0.50	0.0	0.0	0.0	0.0	0.0												
	29	0.0	0.0	0.0	0.0	0.0	0.02	0.0	0.0	0.0	0.0	0.0	0.0												
	30	0.0	0.0	0.0	0.0	0.0	0.0	0.25	0.0	0.01	0.0	0.0	0.0												
	31	0.0	0.0	0.0	0.0	0.0	0.0	0.35	0.0	0.0	0.0	0.0	0.0												
TOTAL		0.0	0.29	1.14	0.22	0.00	0.03	3.30	3.98	1.44	0.05	0.0	0.41												
STA AV		0.33	0.82	0.83	0.17	0.13	0.02	2.55	3.97	1.15	0.09	0.30	0.49												

NOTES: Data are Thiessen weighted averages from 17 rain gages. STA AV are based on 1968-70 data.

1970 MEAN DAILY DISCHARGE (cfs) TOMBSTONE, ARIZONA W-8												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.138E	0.0	0.0	0.0	0.0
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.106E	0.0	0.0	0.0	0.0
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.017E	0.0	0.0	0.0	0.0
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.069E	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.139E	0.0	0.0	0.0
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	12.214E	0.0	0.0	0.0	0.0
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	19.658E	0.0	0.0	0.0	0.0
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.076E	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.526E	0.0	0.0	0.0	0.0
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.0	0.0	0.0	0.0	10.144E	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.002E	0.0	0.0	0.0	0.0
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	0.0	0.0	0.0	0.0	0.0	0.0	1.192	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	0.0	0.0	0.0	0.0	0.0	0.0	0.053E	0.0	0.0	0.0	0.0	0.0
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	0.0	0.0	0.0	0.0	0.0	0.0	0.735E	0.0	0.0	0.0	0.0	0.0
MEAN	0.0	0.0	0.0	0.0	0.0	0.0	0.3911	1.3141	0.0736	0.0	0.0	0.0
INCHES	0.0	0.0	0.0	0.0	0.0	0.0	0.075	0.253	0.014	0.0	0.0	0.0
STA AV	0.0	0.0	0.0	0.0	0.0	0.0	0.050	0.111	0.014	0.0	0.0	0.0

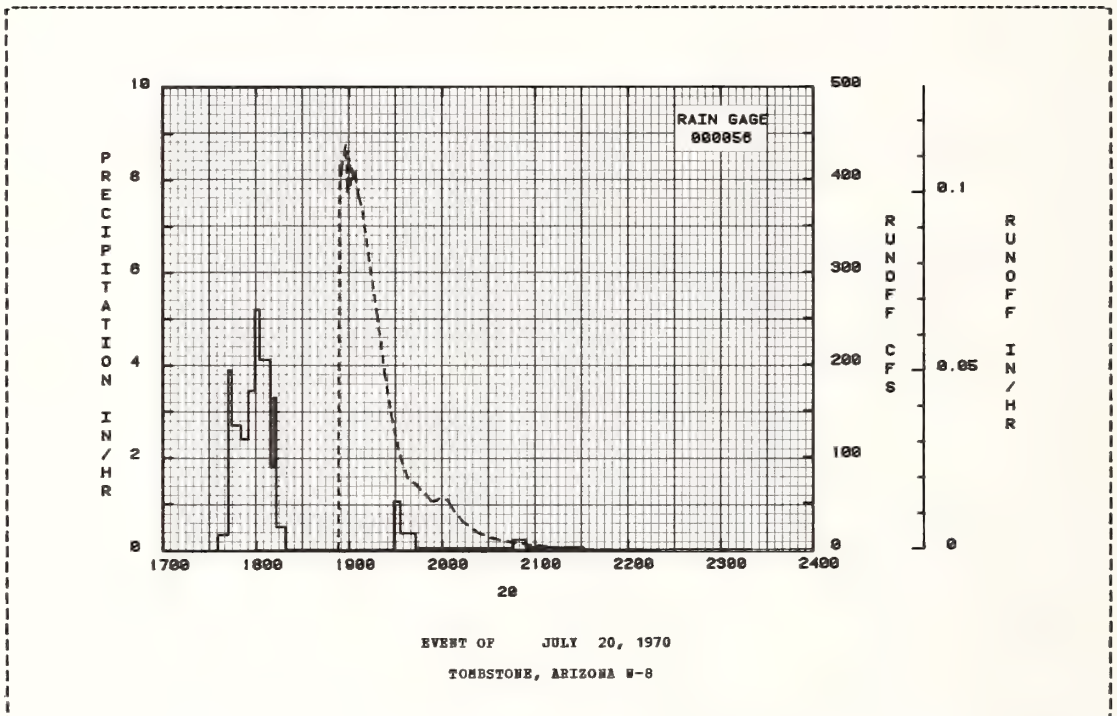
NOTES: To convert mean daily discharge in CFS to IN/DAY, multiply by 0.006215. STA AV are based on 4 yr only (1966, 1968-70).

1970 SELECTED RUNOFF EVENT						TOMBSTONE, ARIZONA W-8					
ANTECEDENT CONDITIONS			RAINFALL			RUNOFF					
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.	
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)	
EVENT OF JULY 20, 1970											
RG 000056											
7-20	0.0	0.0	7-20	1735	0.0	0.0	7-20	1853	0.0	0.0	
				1742	0.3429	0.04		1854	415.719	0.0008	
				1744	3.9010	0.17		1855	404.839	0.0025	
				1750	2.6998	0.44		1856	419.375	0.0042	
				1755	2.4001	0.64		1857	430.434	0.0063	
WATERSHED CONDITIONS:											
Vegetative cover: Approximately 33% of the area is dominated by desert shrubs (whitethorn, creosotebush, tarbush) with a crown spread of approximately 30% and an understory of grasses with less than 1% basal area. The remaining 67% of the area is dominated by grasses (black grama, curly mesquite, sideoats grama) with a basal area of about 2.5%, interspersed by desert shrubs with a crown spread of about 5%.				1759	3.4501	0.87	1858	437.881	0.0081		
				1802	5.1997	1.13	1859	387.000	0.0098		
				1809	4.1142	1.61	1900	423.047	0.0118		
				1811	1.8005	1.67	1901	394.092	0.0135		
				1813	3.2993	1.78	1902	412.076	0.0151		
				1819	0.5000	1.83	1903	401.240	0.0167		
				1929	0.0086	1.84	1904	408.449	0.0187		
				1933	1.0500	1.91	1905	397.657	0.0203		
				1943	0.3600	1.97	1906	383.479	0.0219		
				2046	0.0381	2.01	1908	373.000	0.0253		
				2054	0.2250	2.04	1913	312.559	0.0326		
				2131	0.0486	2.07	1918	254.594	0.0386		
							1923	191.341	0.0436		
							1928	137.995	0.0471		
							1933	100.161	0.0496		
							1938	77.462	0.0516		
							1943	70.614	0.0532		
							1953	52.858	0.0559		
							1954	52.858	0.0561		
							1958	55.505	0.0570		
							2003	54.173	0.0582		
							2008	41.775	0.0593		
							2013	31.036	0.0601		
							2023	18.756	0.0612		
							2033	12.000	0.0619		
							2043	8.298	0.0623		
							2053	6.078	0.0626		
							2103	4.033	0.0628		
							2118	1.563	0.0630		
							2133	0.100	0.0631		

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.000259.

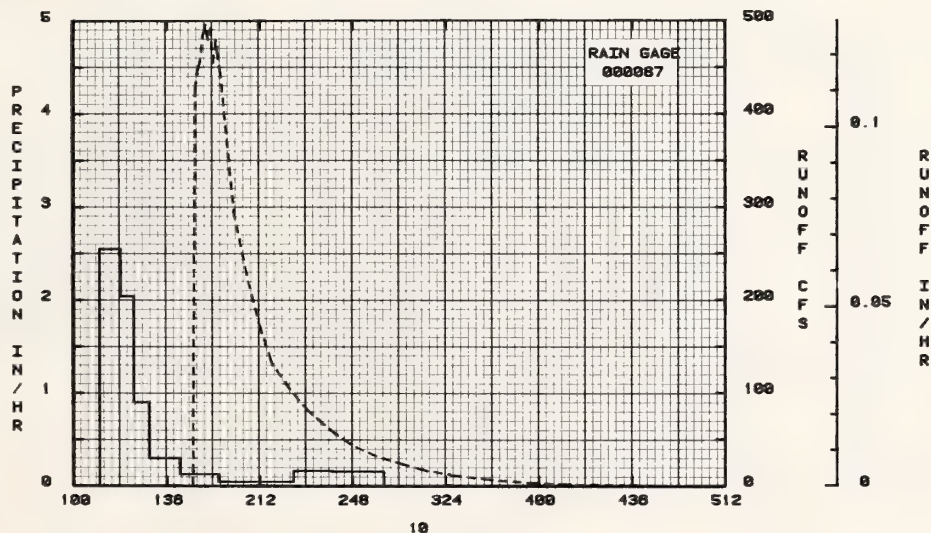
1970 SELECTED RUNOFF EVENT			TOMBSTONE, ARIZONA W-8								
ANTECEDENT CONDITIONS			RAINFALL			RUNOFF					
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.	
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)	
EVENT OF JULY 20, 1970 (CONTINUED)											
								2148	0.0	0.0631	

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.000259.



1970 SELECTED RUNOFF EVENT			TOMBSTONE, ARIZONA W-8						
ANTECEDENT CONDITIONS			RAINFALL			RUNOFF			
Date Mo-Day	Rainfall (inches)	Runoff (inches)	Date Mo-Day	Time of Day	Intensity (in/hr)	Acc. (inches)	Date Mo-Day	Time of Day	Rate (cfs)
									Acc. (inches)
EVENT OF AUGUST 10, 1970									
RG 000087			RG 000087						
8-10	0.0	0.0	8-10	110	0.0	0.0	8-10	146	0.0
				114	2.5500	0.17		147	427.112
				118	2.5500	0.34		148	446.950
				123	2.0400	0.51		149	459.063
				129	0.9000	0.60		150	483.761
WATERSHED CONDITIONS:									
Vegetative cover: Approx-				181	0.3000	0.66		151	496.344
imately 33% of the area is				156	0.1200	0.69		152	479.603
dominated by desert shrubs				225	0.0414	0.71		153	492.134
(whitethorn, creosotebush,				240	0.1600	0.75		154	455.010
tarbush) with a crown spread				300	0.1500	0.80		155	479.603
of approximately 30% and an								156	459.063
understory of grasses with								157	438.961
less than 1% basal area.								202	294.540
The remaining 67% of the area								207	227.123
is dominated by grasses								212	171.569
(black grama, curly mesquite,								217	130.000
sideoats grama) with a basal								222	110.071
area of about 2.5%, inter-								227	91.963
sprersed by desert shrubs								232	77.194
with a crown spread of about								237	65.259
5%.								242	54.424
								247	44.669
								257	31.582
								307	23.152
								317	15.893
								327	10.885
								342	6.000
								357	2.849
								412	1.000
								432	0.0

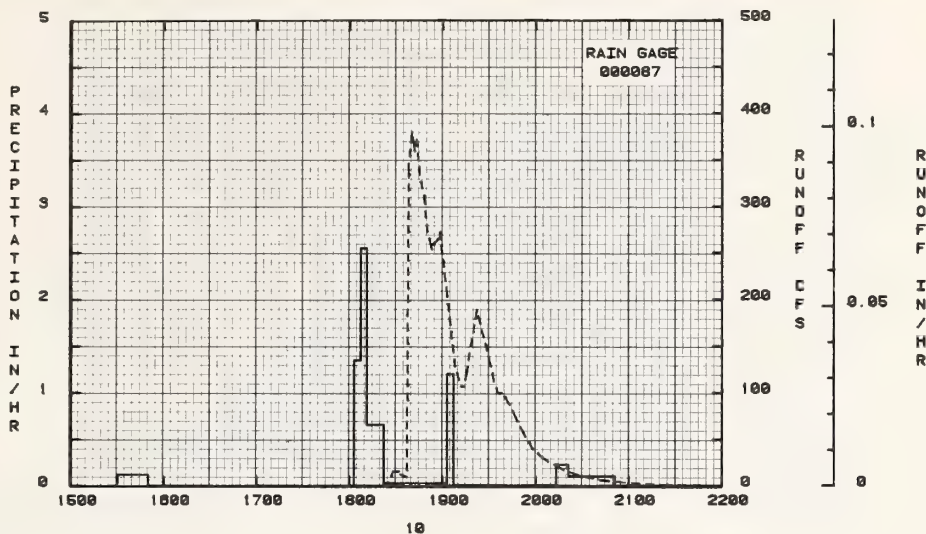
NOTES: To convert runoff in CFS to IN/HR, multiply by 0.000259.



EVENT OF AUGUST 10, 1970
TOMBSTONE, ARIZONA W-8

1970 SELECTED RUNOFF EVENT			TOMBSTONE, ARIZONA W-8							
ANTECEDENT CONDITIONS			RAINFALL				RUNOFF			
Date Mo-Day	Rainfall (inches)	Runoff (inches)	Date Mo-Day	Time of Day	Intensity (in/hr)	Acc. (inches)	Date Mo-Day	Time of Day	Rate (cfs)	Acc. (inches)
EVENT OF AUGUST 10, 1970										
8-10	RG 000087 0.80	0.058	8-10	RG 000087 1530	0.0	0.0	8-10	1823	0.0	0.0
				1550	0.1200	0.04		1825	3.890	0.0
				1803	0.0	0.04		1828	15.893	0.0001
				1807	1.3500	0.13		1832	15.292	0.0004
				1811	2.5500	0.30		1833	12.455	0.0005
WATERSHED CONDITIONS:				1822	0.6545	0.42	1837	9.417	0.0007	
Vegetative cover: Approx-				1903	0.0293	0.44	1838	346.340	0.0016	
imately 33% of the area is				1907	1.2000	0.52	1840	380.590	0.0045	
dominated by desert shrubs				2013	0.0091	0.53	1842	358.969	0.0079	
(whitethorn, creosotebush,				2021	0.2250	0.56	1843	371.854	0.0094	
tarbush) with a crown spread										
of approximately 30% and an				2051	0.1000	0.61	1845	333.965	0.0126	
understory of grasses with							1848	309.975	0.0165	
less than 1% basal area.							1850	272.219	0.0191	
The remaining 67% of the area							1853	253.742	0.0226	
is dominated by grasses							1854	259.325	0.0236	
(black grama, curly mesquite,										
sideoats grama) with a basal							1857	265.000	0.0270	
area of about 2.5%, inter-							1858	272.219	0.0281	
persed by desert shrubs							1903	202.595	0.0331	
with a crown spread of about							1908	127.924	0.0368	
5%.							1912	106.305	0.0388	
							1914	106.305	0.0397	
							1916	127.924	0.0408	
							1922	188.838	0.0428	
							1931	127.924	0.0490	
							1933	111.981	0.0500	
							1936	98.990	0.0514	
							1938	98.990	0.0523	
							1940	95.441	0.0531	
							1943	86.881	0.0543	
							1948	69.605	0.0560	
							1953	53.146	0.0574	
							1958	39.109	0.0584	
							2003	31.582	0.0592	
							2008	25.840	0.0598	
							2018	16.504	0.0607	
							2028	10.885	0.0613	
							2043	5.677	0.0618	
							2058	3.097	0.0621	
							2128	0.183	0.0623	
							2146	0.0	0.0623	

NOTES: To convert runoff in CPS to IN/HR, multiply by 0.000259.

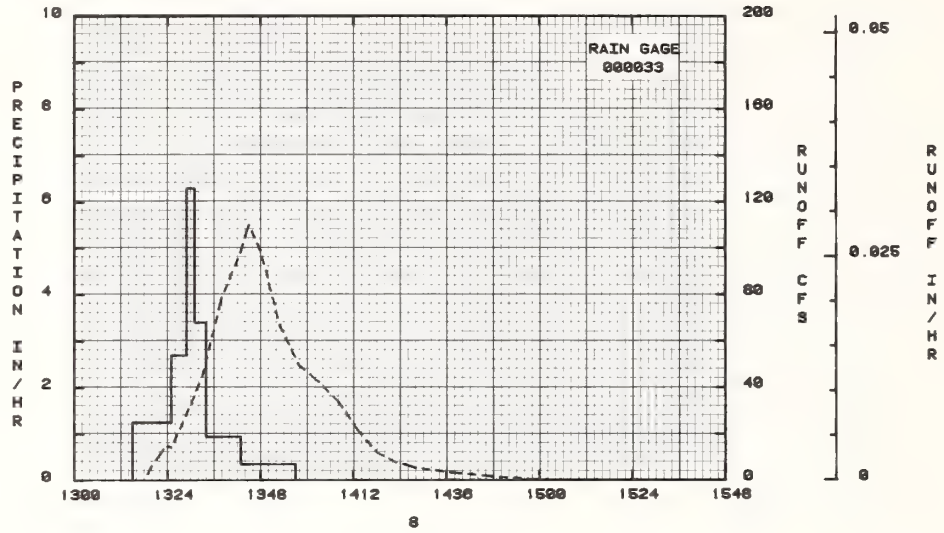


EVENT OF AUGUST 10, 1970

TOMBSTONE, ARIZONA W-8

1970		SELECTED RUNOFF EVENT				TOMBSTONE, ARIZONA W-8				
ANTECEDENT CONDITIONS			RAINFALL				RUNOFF			
Date Mo-Day	Rainfall (inches)	Runoff (inches)	Date Mo-Day	Time of Day	Intensity (in/hr)	Acc. (inches)	Date Mo-Day	Time of Day	Rate (cfs)	Acc. (inches)
EVENT OF SEPTEMBER 8, 1970										
9- 8	RG 000033 0.0	0.0	9- 8	RG 000033 1315	0.0	0.0	9- 8	1317	0.0	0.0
				1325	1.2600	0.21		1318	0.306	0.0
				1329	2.7000	0.39		1320	6.387	0.0
				1331	6.2999	0.60		1323	13.556	0.0001
				1334	3.4000	0.77		1324	14.702	0.0002
WATERSHED CONDITIONS:										
Vegetative cover: Approx-				1343	0.9333	0.91		1325	14.124	0.0003
imately 33% of the area is				1357	0.3429	0.99		1328	25.156	0.0006
dominated by desert shrubs								1333	44.669	0.0013
(whitethorn, creosotebush,								1338	78.765	0.0027
tarbush) with a crown spread								1343	98.990	0.0046
of approximately 30% and an										
understory of grasses with								1345	110.071	0.0056
less than 1% basal area.								1348	98.990	0.0049
The remaining 67% of the area								1353	64.390	0.0087
is dominated by grasses								1358	49.413	0.0099
(black grass, curly mesquite,								1403	42.396	0.0109
sideoats grass) with a basal										
area of about 2.5%, inter-								1408	33.860	0.0117
springs by desert shrubs								1413	21.790	0.0123
with a crown spread of about								1418	11.920	0.0127
5%.								1423	7.617	0.0129
								1428	5.361	0.0130
								1438	3.097	0.0132
								1448	1.534	0.0133
								1458	0.306	0.0133
								1508	0.031	0.0133
								1515	0.0	0.0133

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.000259.



TOMBSTONE, ARIZONA W-11

LOCATION: Cochise County; 4-1/3 miles northeast of Tombstone; Walnut Gulch, San Pedro River, Gila River, Colorado River Basin.

AREA: 2035.00 acres 3.18 sq. miles

MONTHLY PRECIPITATION AND RUNOFF (inches)														TOMBSTONE, ARIZONA W-11									
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual									
1970	P	0.9	0.32	1.05	0.24	0.0	0.05	3.91	3.47	1.23	0.05	0.0	0.43	10.75									
	Q	0.0	0.0	0.0	0.0	0.0	0.0	0.172	0.206	0.0	0.0	0.0	0.0	0.378									
STA AV	P	0.35	0.79	0.82	0.18	0.15	0.03	2.60	4.10	1.06	0.11	0.33	0.50	11.02									
	Q	0.0	0.0	0.0	0.0	0.0	0.0	0.120	0.144	0.019	0.0	0.0	0.0	0.283									
ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																							
		Maximum Discharge		1 Hour		2 Hours		Maximum Volume for Selected Time Interval		6 Hours		12 Hours		2 Days		8 Days							
		Date	Rate	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.						
1970		7-20	0.240	7-20	0.121	7-20	0.128	7-24	0.128	7-24	0.128	7-23	0.128	8- 8	0.163	8- 7	0.174						
MAXIMUMS FOR PERIOD OF RECORD																							
		9-11	0.520	9-10	0.620	9- 9	0.750	9- 9	0.770	9- 9	0.970	9- 9	0.970	9-10	1.460	9- 8	1.700						
		1964		1964		1964		1964		1964		1964		1964		1964							

NOTES: Watershed conditions: Approximately 20% of the area dominated by desert shrubs (whitethorn, creosotebush, tarbush) with a crown spread of approximately 30% and an understory of grasses with a basal area of less than 1%. The remaining 80% of the area supports a grass cover (black grama, curly mesquite, sideoats grama) with a basal cover of about 2.5% interspersed with desert shrubs averaging less than 5% crown. For contour map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1966, USDA Misc. Pub. 1226, p. 63.1-3. For geologic map (p. 63.1-4) and vegetation map (p. 63.1-5) of foregoing reference. Precipitation Data: Records began 1963. Monthly totals are Thiessen weighted averages of 10 rain gages, station averages are for 3 yr (1968-70). Runoff Data: Records began 1963, station averages are based on 1966, 1968-70 data. Temperature Data: See table of daily maximum and minimum values included for Watershed 63.001. For long-time precipitation records, see National Weather Service records at Tombstone, Arizona.

1970 DAILY PRECIPITATION (inches)													TOMBSTONE, ARIZONA W-11	
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
1	0.0	0.0	0.34E	0.0	0.0	0.0	0.00	0.64	0.0	0.01	0.0	0.0		
2	0.0	0.0	0.22E	0.0	0.0	0.0	0.05	0.08	0.04E	0.04	0.0	0.0		
3	0.0	0.0	0.0	0.0	0.0	0.0	0.01	0.06	0.21E	0.0	0.0	0.0		
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.55E	0.0	0.0	0.0		
5	0.0	0.0	0.26E	0.0	0.0	0.0	0.0	0.0	0.03E	0.0	0.0	0.0		
6	0.0	0.0	0.17E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
7	0.0	0.0	0.0	0.0	0.0	0.0	0.04	0.00	0.0	0.0	0.0	0.0		
8	0.0	0.0	0.0	0.0	0.0	0.0	0.05	0.0	0.0	0.0	0.0	0.0		
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.74	0.40	0.0	0.0	0.0		
10	0.0	0.0	0.03	0.0	0.0	0.0	0.0	1.20E	0.0	0.0	0.0	0.0		
11	0.0	0.30	0.04	0.0	0.0	0.0	0.0	0.01	0.0	0.0	0.0	0.0		
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.10	0.0	0.0	0.0	0.0		
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.10	0.0	0.0	0.0	0.0		
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.09E	0.0	0.0	0.0	0.0		
17	0.0	0.0	0.0	0.15	0.0	0.0	0.0	0.26E	0.0	0.0	0.0	0.0		
18	0.0	0.0	0.0	0.09	0.0	0.0	0.01	0.0	0.0	0.0	0.0	0.0		
19	0.0	0.0	0.0	0.0	0.0	0.0	0.07	0.0	0.0	0.0	0.0	0.0		
20	0.0	0.01	0.0	0.0	0.0	0.0	1.50	0.0	0.0	0.0	0.0	0.0		
21	0.0	0.01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.09	0.0	0.0	0.0	0.0		
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.06	0.0	0.0	0.0	0.0		
24	0.0	0.0	0.0	0.0	0.0	0.0	0.59	0.0	0.0	0.0	0.0	0.0		
25	0.0	0.0	0.0	0.0	0.0	0.0	0.25	0.0	0.0	0.0	0.0	0.0		
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.05	0.0	0.0	0.0	0.0		
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.41		
28	0.0	0.0	0.0	0.0	0.0	0.01	0.64	0.0	0.0	0.0	0.0	0.0		
29	0.0	0.0	0.0	0.0	0.0	0.04	0.0	0.0	0.0	0.0	0.0	0.0		
30	0.0	0.0	0.0	0.0	0.0	0.0	0.25	0.0	0.00	0.0	0.0	0.0		
31	0.0	0.0	0.0	0.0	0.0	0.0	0.47	0.0	0.0	0.0	0.0	0.0		
TOTAL	0.0	0.32	1.05	0.24	0.0	0.05	3.91	3.47	1.23	0.05	0.0	0.43		
STA AV	0.35	0.79	0.82	0.18	0.15	0.03	2.60	4.10	1.06	0.11	0.33	0.50		

NOTES: Data are Thiessen weighted averages of 10 rain gages. STA AV are for 3 yr only (1968-70).

1970 MEAN DAILY DISCHARGE (cfs) TOMBSTONE, ARIZONA W-11												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.752	0.0	0.0	0.0	0.0
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0 T	0.0	0.0	0.0	0.0
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0 T	0.0	0.0	0.0	0.0
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.002	0.0 T	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.111E	0.0	0.0	0.0	0.0
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.845E	0.0	0.0	0.0	0.0
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.898	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0 T	0.0	0.0	0.0	0.0
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.0	0.0	0.0	0.0	10.952E	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	0.0	0.0	0.0	0.0	0.0	0.0	0.939	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.236E	0.0	0.0	0.0	0.0	0.0
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0 T	0.0	0.0	0.0	0.0
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	0.0	0.0	0.0	0.0	0.0	0.0	0.236	0.0	0.0	0.0	0.0	0.0
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	0.0	0.0	0.0	0.0	0.0	0.0	0.001	0.0	0.0	0.0	0.0	0.0
31	0.0	0.0	0.0	0.0	0.0	0.0	2.315	0.0	0.0	0.0	0.0	0.0
MEAN	0.0	0.0	0.0	0.0	0.0	0.0	0.4735	0.5680	0.0	0.0	0.0	0.0
INCHES	0.0	0.0	0.0	0.0	0.0	0.0	0.172	0.206	0.0	0.0	0.0	0.0
STA AV	0.0	0.0	0.0	0.0	0.0	0.0	0.120	0.144	0.019	0.0	0.0	0.0

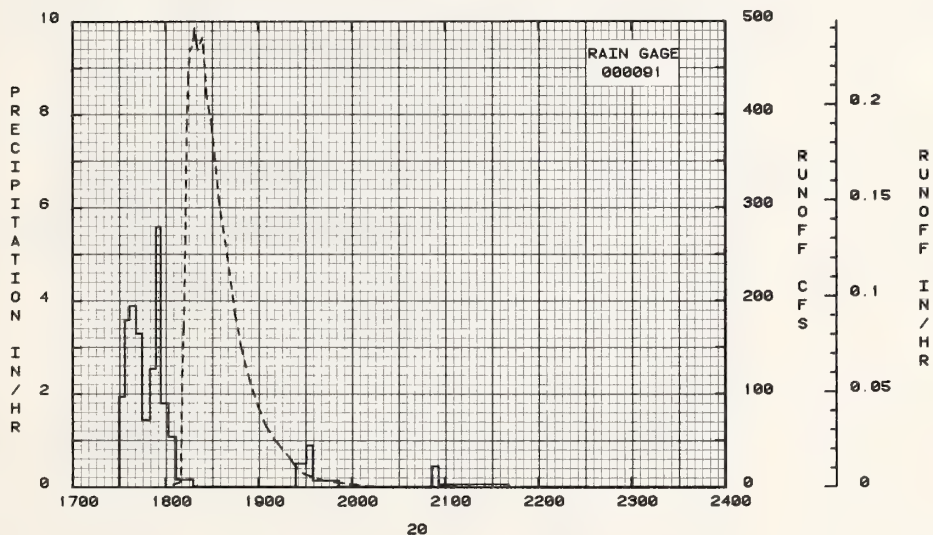
NOTES: To convert mean daily discharge values in CFS to IN/ DAY, multiply by 0.011696. STA AV values are for 4 yr only (1966, 1968-70).

1970 SELECTED RUNOFF EVENT TOMBSTONE, ARIZONA W-11									
ANTECEDENT CONDITIONS			RAINFALL			RUNOFF			
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)
EVENT OF JULY 20, 1970									
RG 000091			RG 000091						
7-20	0.0	0.0	7-20	1730	0.0	0.0	7-20	1802	0.0
				1734	1.9500	0.13		1803	0.288
				1737	3.6009	0.31		1805	2.851
				1741	3.9001	0.57		1810	5.800
				1745	3.2993	0.79		1811	126.756
WATERSHED CONDITIONS: Vegetative cover: Approximately 20% of the area is dominated by desert shrubs (whitethorn, creosotebush, tarbush) with a crown spread of approximately 30% cover and an understory of grasses with basal area of less than 1%. The remaining 80% of the area supports a grass cover (black grama, curly mesquite, sideoats grama) with basal cover of about 2.5% interspersed with desert shrubs averaging less than 5% crown cover.				1750	1.4401	0.91		1812	178.713
				1754	2.5500	1.08		1813	270.147
				1757	5.5997	1.36		1814	394.969
				1802	1.8001	1.51		1815	446.081
				1807	1.0801	1.60		1816	469.298
				1818	0.1636	1.63		1817	472.656
				1924	0.0091	1.64		1818	479.406
				1931	0.5143	1.70		1819	493.031
				1935	0.9000	1.76		1820	479.406
				1952	0.1412	1.80		1821	469.298
				2052	0.0100	1.81		1823	479.406
				2056	0.4500	1.84		1824	482.798
				2141	0.0533	1.88		1825	465.948
								1827	416.995
								1830	388.774
								1835	302.708
								1840	250.379
								1845	185.823
								1850	143.101
								1855	111.389
								1900	85.865
								1905	65.185
								1910	51.787
								1915	41.375
								1920	31.405
								1925	19.792
								1930	13.282
								1940	7.513
								1950	4.804
								2000	2.851

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.000487.

1970 SELECTED RUNOFF EVENT						TOMBSTONE, ARIZONA W-11				
ANTECEDENT CONDITIONS			RAINFALL				RUNOFF			
Date Mo-Day	Rainfall (inches)	Runoff (inches)	Date Mo-Day	Time of Day	Intensity (in/hr)	Acc. (inches)	Date Mo-Day	Time of Day	Rate (cfs)	Acc. (inches)
EVENT OF JULY 20, 1970 (CONTINUED)										
							7-20	2010	0.709	0.1280
								2020	0.151	0.1280
								2030	0.0	0.1280

NOTES: To convert runoff in CPS to IN/HR, multiply by 0.000487.



EVENT OF JULY 20, 1970
TOMBSTONE, ARIZONA W-11

TOMBSTONE, ARIZONA W-15

LOCATION: Cochise County; 3/4 miles east of Tombstone; Walnut Gulch, San Pedro River, Gila River, Colorado River Basin.

AREA: 5912.00 acres 9.24 sq. miles

MONTHLY PRECIPITATION AND RUNOFF (inches)														TOMBSTONE, ARIZONA W-15																	
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual																	
1970	P	0.0	0.33	1.57	0.19	0.00	0.03	2.51	4.15	1.27	0.04	0.0	0.40	10.49																	
	Q	0.0	0.0	0.0	0.0	0.0	0.0	0.021	0.195	0.002	0.0	0.0	0.0	0.218																	
STA AV	P	0.45	0.58	0.54	0.14	0.17	0.12	3.67	3.50	1.29	0.06	0.27	1.28	12.06																	
	Q	0.0	0.0	0.0	0.0	0.0	0.0	0.024	0.134	0.020	0.0	0.0	0.0	0.179																	
ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																															
		Maximum Discharge		1 Hour		2 Hours		Maximum Volume for Selected Time Interval																							
		Date	Rate	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.				
1970		8-17	0.145	8-17	0.080	8-17	0.100	8-17	0.120	8-17	0.121	8-16	0.177	8-16	0.181	8-10	0.184														
MAXIMUMS FOR PERIOD OF RECORD																															
		8-31	0.181	8-19	0.130	8-19	0.170	8-19	0.200	8-19	0.200	8-19	0.230	8-19	0.250	8-19	0.250														
		1968		1966		1966		1966		1966		1966		1966		1966															

NOTES: Watershed conditions: Vegetative cover: Desert shrubs (whitethorn, creosotebush, tarbush) occupy 78% of the area with a crown spread of approximately 30% and an understory of grasses of less than 1% basal area. 22% of the area is in grass cover (black grama, tobosa grass, blue grama, sideoats grama, and curly mesquite grass) of approximately 2% basal area. For topographic, geologic, and vegetation maps, see pages 63.1-3, 63.1-4 and 63.1-5, respectively, of Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1966, USDA Misc. Pub. 1226. Precipitation Data: Records began January 1965. Monthly totals Thiessen weighted averages of 15 rain gages. Runoff Data: Records began January 1965. Station averages for precipitation and runoff based on 1965-1970 record period. Temperature Data: For table of daily maximum and minimum values, see information included for Watershed 63.001. For long-time precipitation records, see National Weather Service records at Tombstone, Arizona.

1970 DAILY PRECIPITATION (inches)														TOMBSTONE, ARIZONA W-15													
	Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec														
1	0.0	0.0	0.35	0.0	0.0	0.0	0.0	0.00	0.51E	0.0	0.01	0.0	0.0														
2	0.0	0.0	0.40	0.0	0.0	0.0	0.0	0.01	0.39E	0.02	0.03	0.0	0.0														
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.33E	0.17E	0.0	0.0	0.0														
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.53E	0.0	0.0	0.0														
5	0.0	0.0	0.42E	0.0	0.0	0.0	0.0	0.0	0.00	0.02E	0.0	0.0	0.0														
6	0.0	0.0	0.28E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0														
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.08	0.17	0.0	0.0	0.0	0.0														
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.0	0.10	0.0	0.0	0.0														
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.17	0.36	0.0	0.0	0.0														
10	0.0	0.0	0.02E	0.0	0.0	0.0	0.0	0.0	0.51E	0.00	0.0	0.0	0.0														
11	0.0	0.28E	0.12E	0.0	0.0	0.0	0.0	0.0	0.01	0.0	0.0	0.0	0.0														
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0														
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0														
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.05	0.0	0.0	0.0	0.0														
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.0	0.0	0.0	0.0														
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.99E	0.0	0.0	0.0	0.0														
17	0.0	0.0	0.0	0.12	0.0	0.0	0.0	0.00	0.77E	0.0	0.0	0.0	0.0														
18	0.0	0.0	0.0	0.06	0.0	0.0	0.0	0.01	0.00	0.0	0.0	0.0	0.0														
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.12	0.16E	0.0	0.0	0.0	0.0														
20	0.0	0.02	0.0	0.0	0.0	0.0	0.0	0.45E	0.0	0.0	0.0	0.0	0.0														
21	0.0	0.01	0.0	0.0	0.0	0.0	0.0	0.02E	0.0	0.0	0.0	0.0	0.0														
22	0.0	0.0	0.0	0.0	0.0	0.0	0.01	0.0	0.05	0.0	0.0	0.0	0.0														
23	0.0	0.02E	0.0	0.0	0.0	0.0	0.0	0.0	0.30	0.0	0.0	0.0	0.0														
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.55	0.0	0.0	0.0	0.0	0.0														
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.01	0.0	0.0	0.0	0.0	0.0														
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.03	0.0	0.0	0.0	0.0														
27	0.0	0.0	0.0	0.0	0.00	0.0	0.0	0.06	0.0	0.0	0.0	0.0	0.0														
28	0.0	0.0	0.0	0.0	0.0	0.0	0.02	0.35	0.0	0.0	0.0	0.0	0.0														
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0														
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.11	0.0	0.07E	0.0	0.0	0.0														
31	0.0		0.0			0.0		0.74E	0.0		0.0		0.0														
TOTAL		0.0	0.33	1.57	0.19	0.00	0.03	2.51	4.15	1.27	0.04	0.0	0.40														
STA AV		0.45	0.58	0.54	0.14	0.17	0.12	3.67	3.50	1.29	0.06	0.27	1.28														

NOTES: Data are Thiessen weighted averages of 15 rain gages. STA AV are based on 6 yr record period (1965-70).

1970 MEAN DAILY DISCHARGE (cfs) TOMBSTONE, ARIZONA W-15												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.029	0.0	0.0	0.0	0.0
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.003	0.0	0.0	0.0	0.0
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.793	0.0	0.0	0.0	0.0
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.002	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.489	0.0	0.0	0.0
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.004	0.0 T	0.0	0.0	0.0
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.684	0.0	0.0	0.0	0.0
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0 T	0.0	0.0	0.0	0.0
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0 T	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	13.619	0.0	0.0	0.0	0.0
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	31.242	0.0	0.0	0.0	0.0
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.118	0.0	0.0	0.0	0.0
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0 T	0.0	0.0	0.0	0.0
24	0.0	0.0	0.0	0.0	0.0	0.0	0.001	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.001	0.0	0.0	0.0	0.0
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	0.0	0.0	0.0	0.0	0.0	0.0	5.242	0.0	0.0	0.0	0.0	0.0
MEAN	0.0	0.0	0.0	0.0	0.0	0.0	0.1692	1.5643	0.0164	0.0	0.0	0.0
INCHES	0.0	0.0	0.0	0.0	0.0	0.0	0.021	0.195	0.002	0.0	0.0	0.0
STA AV	0.0	0.0	0.0	0.0	0.0	0.0	0.024	0.134	0.020	0.0	0.0	0.0

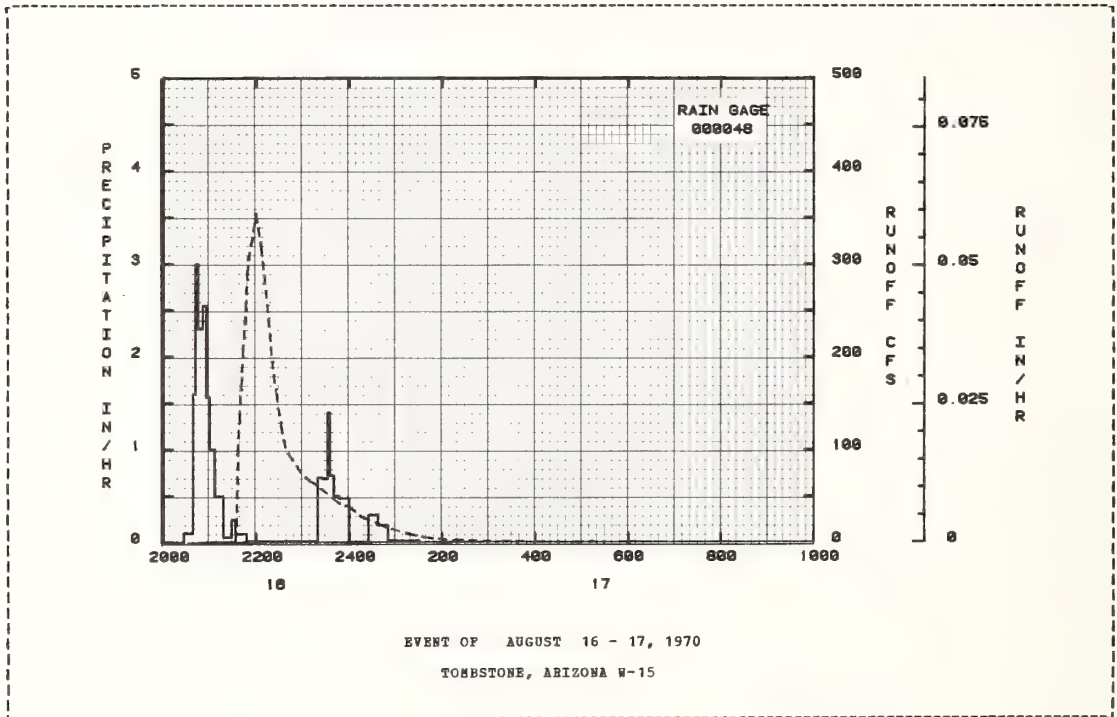
NOTES: To convert mean daily discharge in CFS to IN/DAY, multiply by 0.004026. STA AV are based on 6 yr record period (1965-1970).

1970 SELECTED RUNOFF EVENT TOMBSTONE, ARIZONA W-15										
ANTECEDENT CONDITIONS			RAINFALL			RUNOFF				
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)
EVENT OF AUGUST 16 - 17, 1970										
8-16	RG 060046	0.0	8-16	RG 000048	0.0	0.0	8-16	2056	0.0	0.0
				2026	0.0	0.0		2057	0.012	0.0
				2038	0.1000	0.02		2101	0.031	0.0
				2041	1.6004	0.10		2108	0.059	0.0
				2045	2.9994	0.30		2111	0.059	0.0
				2051	2.3002	0.53				
WATERSHED CONDITIONS: Vegetative cover: Desert shrubs (whitethorn, creosote-bush, tarbush) occupy 76% of area with a crown spread of approximately 30% and an understory of grasses with less than 1% basal area. 22% of the area supports a grass cover (black grama, tobosa, blue grama, sideoats grama and curly mesquite) of approximately 2% basal area.				2055	2.5500	0.70		2115	0.031	0.0
				2100	1.5598	0.83		2120	0.012	0.0
				2106	1.0001	0.93		2129	0.003	0.0
				2117	0.4909	1.02		2133	0.003	0.0
				2128	0.0545	1.03		2134	10.831	0.0
				2133	0.2400	1.05		2136	98.157	0.0003
				2147	0.0857	1.07		2138	134.137	0.0010
				2237	0.0120	1.08		2141	176.428	0.0022
				2319	0.0143	1.09		2143	212.545	0.0033
				2325	0.7001	1.16		2146	252.760	0.0053
				2332	0.6857	1.24		2148	289.271	0.0067
				2335	1.3999	1.31		2151	312.506	0.0093
				2340	0.7200	1.37		2153	320.475	0.0112
				2346	0.5000	1.42		2156	336.748	0.0136
				2409	0.4714	1.53		2158	345.053	0.0158
			8-17	25	0.0	1.53		2159	353.474	0.0167
				37	0.3000	1.59		2201	345.053	0.0188
				50	0.1846	1.63		2206	316.476	0.0234
				130	0.0150	1.64		2211	278.629	0.0275
								2216	232.166	0.0312
								2222	179.285	0.0346
								2227	151.851	0.0370
								2232	124.558	0.0389
								2237	102.316	0.0405
								2242	94.093	0.0419
								2247	88.175	0.0432
								2257	75.188	0.0455
								2307	66.609	0.0475
								2317	61.736	0.0493
								2347	41.673	0.0536

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.000168.

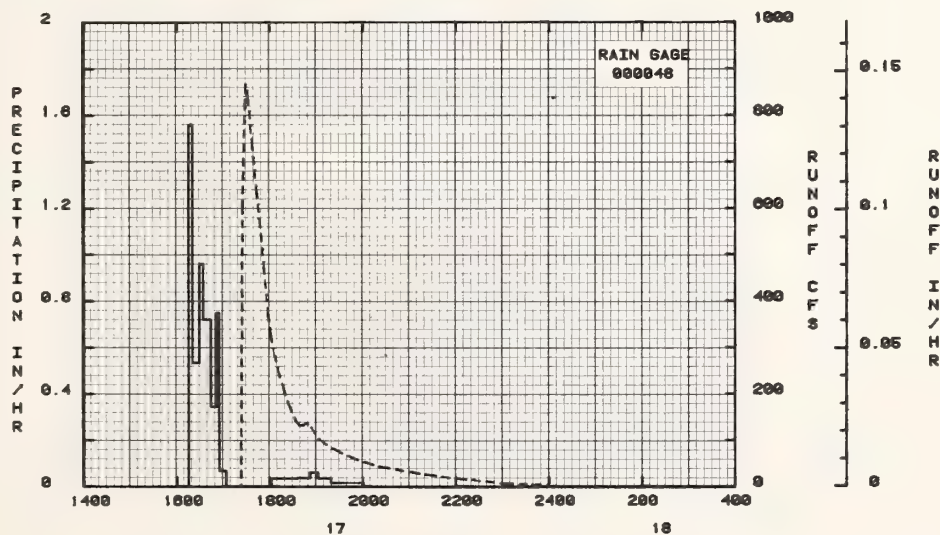
1970 SELECTED RUHOFF EVENT						TOMBSTONE, ARIZONA W-15					
ANTECEDENT CONDITIONS			RAINFALL			RUHOFF					
Date	Rainfall	Runoff	Date	Time	Intensity	Date	Time	Rate	Acc.		
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	Mo-Day	of Day	(cfs)	(inches)		
EVENT OF AUGUST 16 - 17, 1970 (CONTINUED)											
						8-16	2400	37.935	0.0551		
						8-17	17	26.859	0.0566		
							47	16.294	0.0584		
							117	8.526	0.0594		
							147	4.052	0.0599		
							217	2.224	0.0602		
							318	0.696	0.0604		
							453	0.031	0.0605		
							531	0.0	0.0605		

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.000168.



1970 SELECTED RUNOFF EVENT			TOMBSTONE, ARIZONA W-15							
ANTECEDENT CONDITIONS			RAINFALL				RUNOFF			
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)
EVENT OF AUGUST 17, 1970										
RG 000048			RG 000048							
8-17	1.64	0.060	8-17	1615	0.0	0.0	8-17	1722	0.0	0.0
				1620	1.5601	0.13		1723	4.800	0.0
				1629	0.5334	0.21		1725	618.165	0.0016
				1634	0.9599	0.29		1728	818.808	0.0077
				1644	0.7200	0.41		1729	866.708	0.0099
WATERSHED CONDITIONS:										
Vegetative cover: Desert			1651	0.3429	0.45		1731	850.601	0.0150	
shrubs (whitethorn, creosote-			1655	0.7500	0.50		1733	824.068	0.0194	
bush, tarbush) occupy 78% of			1704	0.0667	0.51		1738	725.418	0.0306	
area with a crown spread of			1802	0.0	0.51		1743	637.062	0.0400	
approximately 30% and an			1819	0.0353	0.52		1748	559.068	0.0482	
understory of grasses with										
less than 1% basal area. 22%			1836	0.0353	0.53		1753	459.436	0.0555	
of the area supports a grass			1852	0.0375	0.54		1758	370.654	0.0612	
cover (black grama, tobosa,			1902	0.0600	0.55		1803	312.506	0.0659	
blue grama, sideoats grama			1919	0.0353	0.56		1808	270.672	0.0701	
and curly mesquite) of			2001	0.0143	0.57		1813	235.531	0.0736	
approximately 2% basal area.										
							1818	212.545	0.0767	
							1823	182.168	0.0795	
							1828	162.523	0.0819	
							1833	144.111	0.0840	
							1838	131.706	0.0860	
							1841	131.706	0.0870	
							1843	134.137	0.0878	
							1846	136.594	0.0890	
							1849	134.137	0.0902	
							1854	126.916	0.0920	
							1858	115.371	0.0933	
							1903	102.316	0.0948	
							1913	90.124	0.0975	
							1923	80.614	0.0999	
							1933	71.687	0.1020	
							1953	57.068	0.1056	
							2013	46.962	0.1085	
							2034	39.159	0.1110	
							2104	29.960	0.1139	
							2134	22.102	0.1161	
							2204	16.294	0.1177	
							2304	5.620	0.1195	
							2400	2.765	0.1202	

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.000168.



EVENT OF AUGUST 17, 1970
TOMBSTONE, ARIZONA W-15

SANTA ROSA, NEW MEXICO WATERSHED W-1

LOCATION: Guadalupe and Quay Counties; 30 miles east of Santa Rosa; Alamogordo Creek, Tributary of Pecos River.

AREA: 42880.00 acres 67.00 sq. miles

MONTHLY PRECIPITATION AND RUNOFF (inches)														SANTA ROSA, NEW MEXICO WATERSHED W-1															
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual															
1970	P	0.03	0.05	0.07	0.48	0.41	2.37	3.44	1.37	1.43	0.92	0.01	0.02	10.60															
	Q	0.0	0.0	0.0	0.0	0.0	0.327	0.063	0.004	0.000	0.0	0.0	0.0	0.093															
STA AV	P	0.24	0.18	0.38	0.68	1.37	1.88	3.59	2.19	1.45	1.38	0.22	0.17	13.73															
	Q	0.0	0.0	0.0	0.0	0.037	0.023	0.052	0.017	0.046	0.005	0.0	0.0	0.180															
ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																													
		Maximum Discharge		1 Hour		2 Hours		Maximum Volume for Selected Time Interval				1 Day		2 Days		8 Days													
		Date	Rate	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.												
1970		7-23	0.015	7-23	0.014	7-23	0.023	7-23	0.041	7-23	0.045	7-23	0.046	7-23	0.046	7-17	0.046												
MAXIMUMS FOR PERIOD OF RECORD																													
		5-29	0.034	5-29	0.031	5-29	0.053	5-29	0.096	5-29	0.108	5-29	0.110	6-1	0.110	6-5	0.122												
		1969		1969		1969		1969		1969		1969		1969		1969													

NOTES: Watershed conditions: Grazing land, about 75% of the area is grassland, vegetation consisting of blue grama, galleta, buffalo and ring molly. Remaining 25% of area is pinon, juniper, and various shrubs, with some grasses interspersed. Monthly precipitation values are Thiessen weighted averages of 49 rain gages. For contour map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1969, USDA Misc. Pub. 1370, p. 64.001-3. Precipitation and runoff records began in 1955. STA AV based on 3 yr (1968-70), previously published data are being reevaluated. For long-time precipitation records, see National Weather Service records at Santa Rosa, New Mexico.

1970	DAILY PRECIPITATION (inches)					SANTA ROSA, NEW MEXICO WATERSHED W-1							
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
1	0.0	0.01S	0.0	0.0	0.0	0.0	0.47E	0.16E	0.02	0.0	0.0	0.0	
2	0.0	0.0	0.0	0.0	0.0	0.00	0.0	0.00	0.0	0.0	0.00	0.0	
3	0.0	0.0	0.0	0.00S	0.0	0.0	0.00	0.0	0.0	0.0	0.0	0.0	
4	0.0	0.0	0.0	0.02S	0.0	0.0	0.0	0.0	0.04	0.22E	0.0	0.0	
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.02	0.0	0.0	0.0	
6	0.0	0.0	0.0	0.0	0.0	0.20	0.01E	0.0	0.0	0.0	0.0	0.0	
7	0.0	0.0	0.0	0.0	0.0	0.06	0.01	0.0	0.0	0.03S	0.01E	0.0	
8	0.0	0.0	0.0	0.0	0.0	0.0	0.52E	0.35E	0.0	0.06S	0.0	0.00	
9	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.0	0.0	0.0	0.0	0.0	
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00S	0.0	0.0	
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
12	0.0	0.0	0.0	0.0	0.0	0.0	0.56E	0.0	0.30	0.0	0.0	0.0	
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.42	0.0	0.0	0.0	
14	0.0	0.0	0.0	0.0	0.0	0.01	0.0	0.00	0.0	0.01E	0.0	0.0	
15	0.0	0.0	0.0	0.0	0.0	0.0	0.03	0.02	0.23	0.34E	0.0	0.02E	
16	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.01	0.29	0.21E	0.0	0.00	
17	0.03	0.0	0.0	0.46E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	
18	0.0	0.0	0.0	0.0	0.0	0.0	0.04	0.0	0.0	0.0	0.0	0.0	
19	0.0	0.0	0.0	0.00	0.0	0.0	0.06	0.0	0.0	0.0	0.0	0.0	
20	0.0	0.0	0.0	0.0	0.0	1.43E	0.00	0.70E	0.03	0.0	0.0	0.0	
21	0.0	0.04S	0.0	0.0	0.0	0.0	0.0	0.09E	0.0	0.0	0.0	0.0	
22	0.0	0.0	0.0	0.0	0.0	0.0	0.04E	0.0	0.09	0.02	0.0	0.0	
23	0.0	0.0	0.0	0.0	0.0	0.46	1.28E	0.0	0.0	0.0	0.0	0.0	
24	0.0	0.0	0.0	0.0	0.0	0.02	0.01E	0.0	0.0	0.0	0.0	0.0	
25	0.0	0.0	0.0	0.0	0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.0	
26	0.0	0.0	0.0	0.0	0.03	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
27	0.0	0.0	0.07S	0.0	0.25E	0.0	0.00E	0.0	0.0	0.04E	0.0	0.0	
28	0.0	0.0	0.0	0.0	0.02	0.00	0.01E	0.0	0.0	0.00	0.0	0.0	
29	0.0	0.0	0.0	0.0	0.0	0.17	0.04E	0.0	0.0	0.0	0.0	0.0	
30	0.0	0.0	0.0	0.0	0.0	0.02	0.0	0.0	0.0	0.0	0.0	0.0	
31	0.0	0.0	0.0	0.0	0.11	0.0	0.35E	0.04	0.0	0.0	0.0	0.0	
TOTAL	0.03	0.05	0.07	0.48	0.41	2.37	3.44	1.37	1.43	0.92	0.01	0.02	
STA AV	0.24	0.18	0.38	0.68	1.37	1.88	3.59	2.19	1.45	1.38	0.22	0.17	

NOTES: Daily values are Thiessen weighted average amounts from 49 rain gages. Precipitation records began in 1955. STA AV are based on 3 yr (1968-1970).

1970 MEAN DAILY DISCHARGE (cfs) SANTA ROSA, NEW MEXICO WATERSHED W-1												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.0	0.0	0.0	0.0	0.0	0.0	0.005	0.0 T	0.0	0.0	0.0	0.0
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.006	0.0	0.0
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.001	0.0	0.0
8	0.0	0.0	0.0	0.0	0.0	0.0	3.471	0.0	0.0	0.001	0.0	0.0
9	0.0	0.0	0.0	0.0	0.0	0.0	2.225E	0.0	0.0	0.0	0.0	0.0
10	0.0	0.0	0.0	0.0	0.0	0.0	0.002E	0.0	0.0	0.0	0.0	0.0
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	0.0	0.0	0.0	0.0	0.0	0.0	17.692E	0.0	0.0	0.0	0.0	0.0
13	0.0	0.0	0.0	0.0	0.0	0.0	6.919	0.0	0.395	0.0	0.0	0.0
14	0.0	0.0	0.0	0.0	0.0	0.0	0.027E	0.0	0.009	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.002	0.0 E	0.0	0.0
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.093	0.0	0.0	0.0
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.019	0.0	0.0	0.0
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0 E	0.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.0	0.0	0.0	25.590E	0.0	0.001	0.0	0.0	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	2.308E	0.0	6.157	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.0	0.0	0.009E	0.0	0.205E	0.0	0.0	0.0	0.0
23	0.0	0.0	0.0	0.0	0.0	18.143E	28.063	0.0	0.0	0.0	0.0	0.0
24	0.0	0.0	0.0	0.0	0.0	2.159	54.691E	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.043E	0.052E	0.0	0.0	0.0	0.0	0.0
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0 T	0.0	0.0	0.0	0.0	0.0
MEAN	0.0	0.0	0.0	0.0	0.0	1.6084	3.6500	0.2053	0.0173	0.0003	0.0	0.0
INCHES	0.0	0.0	0.0	0.0	0.0	0.027	0.063	0.004	0.000	0.0	0.0	0.0
STA AV	0.0	0.0	0.0	0.0	0.037	0.023	0.052	0.017	0.046	0.005	0.0	0.0

NOTES: To convert mean daily discharge in CFS to IN/DAY, multiply by 0.000555. Runoff records began in 1955. STA AV based on 3 yr (1968-1970).

NEWELL, SOUTH DAKOTA WATERSHED W-2

LOCATION: Butte Co., South Dakota, 33 mi. NE of Newell, Sand Creek, South Moreau River Watershed.

AREA: 115.00 acres

MONTHLY PRECIPITATION AND RUNOFF (inches)													NEWELL, SOUTH DAKOTA WATERSHED W-2												
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual											
1970	P	0.39	0.20	0.60	1.62	2.63	1.40	1.40	0.33	0.46	0.15	0.86	0.29	10.33											
	Q	0.0	0.0	0.025	0.061	0.019	0.004	0.002	0.0	0.0	0.0	0.0	0.0	0.111											
STA AV	P	0.21	0.24	0.44	1.13	2.06	3.21	1.89	0.99	1.01	0.38	0.32	0.26	12.15											
	Q	0.007	0.062	0.142	0.019	0.086	0.083	0.143	0.0	0.007	0.0	0.0	0.0	0.551											

NOTES: Watershed conditions: 100% rangeland; Condition classes: excellent - 19%; good - 64%; fair - 17%; Degree of grazing: moderate. For map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1956-59, USDA Misc. Pub. 945, p. 65.2-4. Precipitation from rain gage W-2A. Precipitation and runoff records began January 1958. Precipitation and runoff STA AV based on 13 yr (1958-70) record period. For long-time precipitation records, see National Weather Service records at Newell, South Dakota.

1970 DAILY PRECIPITATION (inches)														NEWELL, SOUTH DAKOTA WATERSHED W-2									
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec											
1	0.03S	0.0	0.03S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0										
2	0.02S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.06	0.0	0.0	0.0	0.0										
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.08	0.0	0.0	0.06S	0.0	0.0										
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0										
5	0.0	0.0	0.0	0.0	0.0	0.0	0.04	0.19	0.0	0.0	0.0	0.0	0.0										
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.01	0.20	0.0	0.0	0.0	0.0										
7	0.0	0.0	0.0	0.0	0.21	0.0	0.0	0.0	0.0	0.0	0.12S	0.0	0.0										
8	0.0	0.0	0.03S	0.0	0.48	0.0	0.03	0.0	0.0	0.0	0.11S	0.0	0.0										
9	0.0	0.0	0.08S	0.0	0.10	0.0	0.0	0.0	0.0	0.0	0.0	0.16S	0.0										
10	0.0	0.0	0.02S	0.0	0.66	0.11	0.0	0.0	0.0	0.0	0.04S	0.07S	0.0										
11	0.0	0.0	0.0	0.83M	0.0	0.14	0.0	0.0	0.0	0.0	0.0	0.0	0.0										
12	0.0	0.0	0.0	0.09M	0.0	0.87	0.0	0.0	0.0	0.09S	0.0	0.0	0.0										
13	0.0	0.0	0.0	0.0	0.04	0.0	0.48	0.0	0.09S	0.0	0.15S	0.0	0.0										
14	0.0	0.0	0.0	0.08S	0.09	0.0	0.0	0.0	0.05S	0.0	0.0	0.0	0.0										
15	0.0	0.0	0.0	0.13S	0.0	0.21	0.0	0.0	0.0	0.0	0.0	0.0	0.0										
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0										
17	0.02S	0.09S	0.04S	0.04S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0										
18	0.05S	0.01S	0.11S	0.24S	0.0	0.0	0.0	0.0	0.0	0.0	0.03S	0.02S	0.0										
19	0.03S	0.02S	0.02S	0.0	0.0	0.02	0.0	0.0	0.0	0.0	0.02S	0.0	0.0										
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0										
21	0.0	0.0	0.0	0.0	0.11	0.0	0.08	0.02	0.0	0.0	0.03S	0.0	0.0										
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.04S	0.0										
23	0.0	0.0	0.06S	0.03	0.0	0.0	0.76	0.0	0.06S	0.0	0.0	0.0	0.0										
24	0.24S	0.0	0.0	0.0	0.07	0.05	0.0	0.0	0.0	0.0	0.0	0.0	0.0										
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.06S	0.17S	0.0	0.0										
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.04S	0.0	0.0										
27	0.0	0.02S	0.20S	0.02	0.27	0.0	0.0	0.03	0.0	0.0	0.09S	0.0	0.0										
28	0.0	0.06S	0.01S	0.16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0										
29	0.0		0.0	0.0	0.10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0										
30	0.0		0.0	0.0	0.27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0										
31	0.0		0.0		0.23		0.0	0.0		0.0		0.0	0.0										
TOTAL	0.39	0.20	0.60	1.62	2.63	1.40	1.40	0.33	0.46	0.15	0.86	0.29											
STA AV	0.21	0.24	0.44	1.13	2.06	3.21	1.89	0.99	1.01	0.38	0.32	0.26											

NOTES: Precipitation from rain gage W-2A. STA AV based on 13 yr (1958-70) record period.

1970 MEAN DAILY DISCHARGE (cfs) NEWELL, SOUTH DAKOTA WATERSHED W-2												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7	0.0	0.0	0.048	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8	0.0	0.0	0.0	0.0	0.019	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10	0.0	0.0	0.0	0.0	0.010	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11	0.0	0.0	0.0	0.024	0.063	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	0.0	0.0	0.0	0.019	0.0	0.019	0.0	0.0	0.0	0.0	0.0	0.0
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.014	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.0	0.0	0.010	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	0.0	0.0	0.0	0.019	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	0.0	0.0	0.0	0.024	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.0	0.014	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.0	0.014	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.024	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	0.0	0.0	0.072	0.058	0.0	0.0	0.010	0.0	0.0	0.0	0.0	0.0
24	0.0	0.0	0.0	0.034	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.014	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	0.0	0.0	0.0	0.014	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	0.0	0.0	0.0	0.010	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	0.0		0.0		0.0		0.0	0.0		0.0		0.0
MEAN	0.0	0.0	0.0039	0.0098	0.0030	0.0006	0.0003	0.0	0.0	0.0	0.0	0.0
INCHES	0.0	0.0	0.025	0.061	0.019	0.004	0.002	0.0	0.0	0.0	0.0	0.0
STA AV	0.007	0.062	0.142	0.019	0.086	0.083	0.143	0.0	0.007	0.0	0.0	0.0

NOTES: STA AV based on 13 yr (1958-70) record period. To convert mean daily discharge in CFS to IN/DAY, multiply by 0.20697.

NEWELL, SOUTH DAKOTA WATERSHED W-5

LOCATION: Butte Co., South Dakota, 34 mi. NE of Newell, South Moreau River Watershed.

AREA: 46.00 acres

MONTHLY PRECIPITATION AND RUNOFF (inches)							NEWELL, SOUTH DAKOTA WATERSHED W-5							
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
1970	P	0.48	0.43	1.01	2.15	3.63	1.31	1.24	0.41	0.65	0.27	1.22	0.70	13.50
	Q	0.0	0.023	0.033	0.106	0.175	0.0	0.9	0.0	0.0	0.0	0.0	0.0	0.337
STA AV	P	0.25	0.32	0.61	1.49	2.61	4.13	1.89	1.34	1.04	0.38	0.40	0.40	14.86
	Q	0.016	0.027	0.199	0.029	0.089	0.243	0.057	0.081	0.006	0.0	0.0	0.0	0.747

NOTES: Watershed conditions: 100% rangeland; Condition classes: excellent - 7%; good - 93%; Degree of grazing: moderate; Production of cover: 2163 pounds per acre of oven-dry material. For map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1956-59, USDA Misc. Pub. 945, p. 65.5-4. Precipitation from rain gage W-5A. Precipitation and runoff records began January 1958. Precipitation and runoff STA AV based on 13 yr (1958-70) record period. For long-time precipitation records, see National Weather Service records at Newell, South Dakota.

1970 DAILY PRECIPITATION (inches) NEWELL, SOUTH DAKOTA WATERSHED W-5													
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
1	0.01S	0.0	0.04S	0.0	0.0	0.07	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	0.01S	0.0	0.03S	0.0	0.0	0.0	0.0	0.04	0.15	0.0	0.0	0.0	0.0
3	0.03S	0.05S	0.0	0.0	0.0	0.0	0.0	0.13	0.0	0.0	0.0	0.0	0.0
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.12	0.0	0.0	0.0	0.0	0.0
6	0.0	0.0	0.0	0.0	0.0	0.0	0.10	0.07	0.14	0.0	0.0	0.0	0.0
7	0.0	0.0	0.0	0.0	0.15	0.0	0.0	0.0	0.05	0.0	0.23S	0.0	0.0
8	0.0	0.0	0.03S	0.0	0.70	0.0	0.0	0.0	0.03	0.0	0.12S	0.0	0.0
9	0.0	0.0	0.10S	0.0	0.40	0.07	0.0	0.0	0.05	0.0	0.0	0.30S	0.0
10	0.0	0.0	0.05S	0.02S	0.52	0.08	0.0	0.0	0.0	0.0	0.11S	0.23S	0.0
11	0.0	0.0	0.0	0.73S	0.21	0.05	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	0.0	0.0	0.0	0.23S	0.07	0.80	0.0	0.0	0.0	0.06S	0.0	0.0	0.0
13	0.0	0.0	0.0	0.0	0.18	0.0	0.47	0.0	0.11S	0.0	0.16S	0.0	0.0
14	0.0	0.03S	0.0	0.05S	0.24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.02S	0.0	0.30S	0.0	0.15	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.09S	0.0	0.0	0.0	0.0
17	0.0	0.12S	0.15S	0.20S	0.0	0.01	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	0.02S	0.04S	0.13S	0.46S	0.0	0.0	0.0	0.0	0.0	0.0	0.10S	0.05S	0.0
19	0.10S	0.0	0.0	0.03S	0.0	0.05	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.0	0.0	0.01	0.0	0.02	0.05	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.12S	0.0
23	0.0	0.0	0.13S	0.0	0.05	0.0	0.65	0.0	0.0	0.0	0.0	0.0	0.0
24	0.26S	0.0	0.0	0.0	0.0	0.03	0.0	0.0	0.03S	0.0	0.0	0.0	0.0
25	0.02S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.05S	0.21S	0.0	0.0
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.16S	0.07S	0.0	0.0
27	0.02S	0.05S	0.0	0.13	0.13	0.0	0.0	0.0	0.0	0.0	0.22S	0.0	0.0
28	0.01S	0.12S	0.31S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	0.0	0.0	0.04S	0.0	0.28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	0.0	0.0	0.0	0.0	0.37	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	0.0	0.0	0.0	0.0	0.32	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL		0.48	0.43	1.01	2.15	3.63	1.31	1.24	0.41	0.65	0.27	1.22	0.70
STA AV		0.25	0.32	0.61	1.49	2.61	4.13	1.89	1.34	1.04	0.38	0.40	0.40

NOTES: Precipitation from rain gage W-5A. STA AV based on 13 yr (1958-70) record period.

1970 MEAN DAILY DISCHARGE (cfs) NEWELL, SOUTH DAKOTA WATERSHED W-5												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8	0.0	0.0	0.0	0.0	0.091	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9	0.0	0.0	0.0	0.0	0.019	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10	0.0	0.0	0.0	0.0	0.091	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11	0.0	0.0	0.0	0.0	0.104	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13	0.0	0.0	0.0	0.0	0.0041	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	0.0	0.0	0.0	0.0	0.012	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.044	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.0	0.027	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.079	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	0.0	0.0	0.0	0.099	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	0.0	0.0	0.064	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	0.0	0.0	0.0	0.017	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MEAN	0.0	0.0016	0.0021	0.0068	0.0109	0.0	0.0	0.0	0.0	0.0	0.0	0.0
INCHES	0.0	0.023	0.033	0.106	0.175	0.0	0.0	0.0	0.0	0.0	0.0	0.0
STA AV	0.016	0.027	0.199	0.029	0.389	0.243	0.057	0.081	0.006	0.0	0.0	0.0

NOTES: STA AV based on 13 yr (1958-70) record period. To convert mean daily discharge in CFS to IN/DAY, multiply by 0.51743.

NEWELL, SOUTH DAKOTA WATERSHED W-7

LOCATION: Butte Co., South Dakota, 35 mi. NE of Newell, Tributary Trail Creek, South Moreau Watershed.

AREA: 160.00 acres

MONTHLY PRECIPITATION AND RUNOFF (inches)							NEWELL, SOUTH DAKOTA WATERSHED W-7							
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
1970	P	0.41	0.24	0.70	1.43	3.89	1.27	1.24	0.40	0.70	0.24	0.84	0.34	11.70
	Q	0.0	0.001	0.002	0.037	0.038	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.078
STA AV	P	0.22	0.27	0.56	1.24	2.46	3.65	1.80	1.20	0.95	0.36	0.37	0.33	13.41
	Q	0.021	0.016	0.152	0.019	0.033	0.094	0.028	0.015	0.002	0.0	0.0	0.0	0.380

NOTES: Watershed conditions: 100% rangeland; Condition classes: good - 82%; fair - 18%; Degree of grazing: moderate. For map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1956-59, USDA Misc. Pub. 945, p. 65.7-4. Precipitation from rain gage W-7A. Precipitation and runoff records began January 1958. Precipitation and runoff STA AV based on 13 yr (1958-70) record period. For long-time precipitation records, see National Weather Service records at Newell, South Dakota.

1970		DAILY PRECIPITATION (inches)					NEWELL, SOUTH DAKOTA WATERSHED W-7						
	Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
	1	0.01S	0.0	0.02S	0.0	0.0	0.08	0.0	0.0	0.0	0.0	0.0	0.0
	2	0.01S	0.0	0.02S	0.0	0.0	0.0	0.0	0.04	0.16	0.0	0.0	0.0
	3	0.02S	0.05S	0.0	0.0	0.0	0.0	0.0	0.10	0.0	0.0	0.0	0.0
	4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.12	0.0	0.0	0.0	0.0
	6	0.0	0.0	0.0	0.0	0.0	0.0	0.13	0.10	0.14	0.0	0.0	0.0
	7	0.0	0.0	0.0	0.0	0.17	0.0	0.0	0.0	0.07	0.0	0.21S	0.0
	8	0.0	0.0	0.02S	0.0	1.01	0.0	0.0	0.0	0.03	0.0	0.15S	0.0
	9	0.0	0.0	0.08S	0.0	0.11	0.05	0.0	0.0	0.07	0.0	0.0	0.17S
	10	0.0	0.0	0.03S	0.02S	0.69	0.09	0.0	0.0	0.0	0.0	0.07S	0.07S
	11	0.0	0.0	0.0	0.78S	0.02	0.12	0.0	0.0	0.0	0.0	0.0	0.0
	12	0.0	0.0	0.0	0.07S	0.06	0.80	0.0	0.0	0.0	0.06S	0.0	0.0
	13	0.0	0.0	0.0	0.0	0.12	0.0	0.50	0.0	0.09S	0.0	0.07S	0.0
	14	0.0	0.03S	0.0	0.06S	0.23	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	15	0.0	0.01S	0.0	0.16S	0.0	0.02	0.0	0.0	0.0	0.0	0.0	0.0
	16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.13S	0.0	0.0	0.0
	17	0.0	0.06S	0.08S	0.14S	0.0	0.01	0.0	0.0	0.0	0.0	0.0	0.0
	18	0.02S	0.01S	0.08S	0.16S	0.0	0.0	0.0	0.0	0.0	0.0	0.08S	0.03S
	19	0.05S	0.0	0.0	0.02S	0.0	0.06	0.0	0.0	0.0	0.0	0.0	0.0
	20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	21	0.0	0.0	0.0	0.0	0.01	0.0	0.03	0.04	0.0	0.0	0.0	0.0
	22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.07S
	23	0.0	0.0	0.07S	0.0	0.15	0.0	0.58	0.0	0.0	0.0	0.0	0.0
	24	0.25S	0.0	0.0	0.0	0.0	0.04	0.0	0.0	0.01S	0.0	0.0	0.0
	25	0.02S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.06S	0.14S	0.0
	26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.12S	0.03S	0.0
	27	0.02S	0.02S	0.0	0.02	0.18	0.0	0.0	0.0	0.0	0.0	0.09S	0.0
	28	0.01S	0.06S	0.29S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	29	0.0	0.01S	0.0	0.0	3.44	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	30	0.0	0.0	0.0	0.0	0.33	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	31	0.0	0.0	0.0	0.0	0.37	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL		0.41	0.24	0.70	1.43	3.89	1.27	1.24	0.40	0.70	0.24	0.84	0.34
STA AV		0.22	0.27	0.56	1.24	2.46	3.65	1.80	1.20	0.95	0.36	0.37	0.33

NOTES: Precipitation from rain gage W-7A. STA AV based on 13 yr (1958-70) record period.

1970 MEAN DAILY DISCHARGE (cfs) NEWELL, SOUTH DAKOTA WATERSHED W-7												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8	0.0	0.0	0.013	0.0	0.155	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11	0.0	0.0	0.0	0.0	0.027	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	0.0	0.0	0.0	0.0	0.007	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.007	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.0	0.094	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.081	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	0.0	0.0	0.0	0.074	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	0.0		0.0	0.0	0.067	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	0.0		0.0		0.0		0.0	0.0		0.0		0.0
MEAN	0.0	0.0002	0.0004	0.0083	0.0082	0.0	0.0	0.0	0.0	0.0	0.0	0.0
INCHES	0.0	0.001	0.002	0.037	0.038	0.0	0.0	0.0	0.0	0.0	0.0	0.0
STA AV	0.021	0.016	0.152	0.019	0.033	0.094	0.028	0.015	0.002	0.0	0.0	0.0

NOTES: STA AV based on 13 yr (1958-70) record period. To convert mean daily discharge in CFS to IN/DAY, multiply by 0.14876.

NEWELL, SOUTH DAKOTA WATERSHED W-12

LOCATION: Butte Co., South Dakota, 9 mi. East of Newell, Belle Fourche River Watershed.

AREA: 93.00 acres

MONTHLY PRECIPITATION AND RUNOFF (inches)													NEWELL, SOUTH DAKOTA WATERSHED W-12	
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
197J	P	0.17	0.18	0.49	2.04	3.92	0.92	1.40	0.40	0.78	0.53	0.87	0.20	11.90
	Q	0.0	0.040	0.0	0.169	0.800	0.0	0.0	0.0	0.0	0.004	0.023	0.0	1.036
STA AV	P	0.27	0.24	0.60	1.41	2.53	3.24	1.63	0.95	1.18	0.47	0.38	0.29	13.19
	Q	0.067	0.052	0.377	0.268	0.780	0.618	0.101	0.046	0.015	0.000	0.010	0.007	2.340

NOTES: Watershed conditions: 100% rangeland; Condition classes: good - 94%; fair - 6%; Degree of grazing: moderate. For map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1956-59, USDA Misc. Pub. 945, p. 65.12-4. Precipitation from rain gage W-12A. Precipitation and runoff records began January 1958. Precipitation and runoff STA AV based on 13 yr (1958-70) record period. For long-time precipitation records, see National Weather Service records at Newell, South Dakota.

1970 DAILY PRECIPITATION (inches)													NEWELL, SOUTH DAKOTA WATERSHED W-12	
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
1	0.01S	0.0	0.02S	0.0	0.0	0.02	0.0	0.04	0.0	0.0	0.0	0.0	0.0	0.0
2	0.01S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.21	0.0	0.04S	0.0	0.0	0.0
3	0.01S	0.02S	0.0	0.0	0.0	0.0	0.0	0.0	0.05	0.0	0.0	0.0	0.0	0.0
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.05	0.0	0.10	0.05	0.0	0.0	0.0	0.0	0.0	0.0
6	0.0	0.0	0.0	0.0	0.0	0.0	0.10	0.31	0.13	0.0	0.0	0.0	0.0	0.0
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.10	0.0	0.22S	0.0	0.0	0.0
8	0.0	0.0	0.04S	0.0	0.93	0.0	0.03	0.0	0.0	0.0	0.12S	0.03S	0.0	0.0
9	0.0	0.0	0.09S	0.0	0.02	0.01	0.0	0.0	0.0	0.0	0.0	0.07S	0.0	0.0
10	0.0	0.0	0.04S	0.11S	0.44	0.09	0.0	0.0	0.0	0.0	0.07S	0.08S	0.0	0.0
11	0.0	0.0	0.0	1.09S	0.0	0.16	0.08	0.0	0.0	0.0	0.01S	0.0	0.0	0.0
12	0.0	0.0	0.02S	0.10S	0.08	0.54	0.0	0.0	0.0	0.13S	0.0	0.0	0.0	0.0
13	0.0	0.0	0.0	0.0	0.36	0.0	0.50	0.0	0.19S	0.0	0.10S	0.0	0.0	0.0
14	0.0	0.01S	0.0	0.03S	0.50	0.0	0.0	0.0	0.03S	0.0	0.0	0.0	0.0	0.0
15	0.0	0.02S	0.0	0.11S	0.0	0.10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.09S	0.10S	0.16S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	0.02S	0.0	0.03S	0.29S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.02S	0.0	0.0
19	0.07S	0.02S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.04S	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.04S	0.0	0.0	0.0
22	0.0	0.0	0.0	0.0	0.03	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	0.0	0.0	0.0	0.0	0.0	0.0	0.55	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	0.05S	0.0	0.02S	0.0	0.02	0.0	0.0	0.0	0.03S	0.0	0.0	0.0	0.0	0.0
25	0.0	0.02S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.06S	0.18S	0.0	0.0	0.0
26	0.0	0.0	0.03S	0.0	0.0	0.0	0.0	0.0	0.0	0.22S	0.0	0.0	0.0	0.0
27	0.0	0.0	0.01S	0.0	0.03	0.0	0.0	0.0	0.0	0.12S	0.09S	0.0	0.0	0.0
28	0.0	0.0	0.09S	0.05	0.0	0.0	0.04	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	0.0	0.0	0.0	0.19	0.59	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	0.0	0.0	0.0	0.0	0.73	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	0.0	0.0	0.0	0.0	0.14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL		0.17	0.18	0.49	2.04	3.92	0.92	1.40	0.40	0.78	0.53	0.87	0.20	
STA AV		0.27	0.24	0.60	1.41	2.53	3.24	1.63	0.95	1.18	0.47	0.38	0.29	

NOTES: Precipitation from rain gage W-12A. STA AV based on 13 yr (1958-70) record period.

1970 MEAN DAILY DISCHARGE (cfs) NEWELL, SOUTH DAKOTA WATERSHED W-12												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.045	0.0
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7	0.0	0.0	0.0	0.333	0.023	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8	0.0	0.0	0.0	0.0	0.325	0.0	0.0	0.0	0.0	0.0	0.042	0.0
9	0.0	0.0	0.0	0.0	0.227	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10	0.0	0.0	0.0	0.0	0.431	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11	0.0	0.0	0.0	0.253	0.265	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13	0.0	0.0	0.0	0.0	0.045	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	0.0	0.0	0.0	0.0	1.584	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	0.0	0.0	0.0	0.011	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	0.0	0.151	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.015	0.0	0.0
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	0.0	0.0	0.0	0.042	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	0.0	0.0	0.0	0.0	0.125	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MEAN	0.0	0.0054	0.0	0.0213	0.0976	0.0	0.0	0.0	0.0	0.0005	0.0029	0.0
INCHES	0.0	0.040	0.0	0.169	0.800	0.0	0.0	0.0	0.0	0.004	0.023	0.0
STA AV	0.067	0.052	0.377	0.268	0.780	0.618	0.101	0.046	0.015	0.000	0.010	0.007

NOTES: STA AV based on 13 yr (1968-70) record period. To convert mean daily discharge in CFS to IN/DAY, multiply by 0.26446.

NEWELL, SOUTH DAKOTA WATERSHED W-13

LOCATION: Meade Co., South Dakota, 26 mi. East of Newell, South Fork Sulphur Creek, Cheyenne River Watershed.

AREA: 160.00 acres

MONTHLY PRECIPITATION AND RUNOFF (inches)												
NEWELL, SOUTH DAKOTA WATERSHED W-13												
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1970	P 0.23	0.19	0.53	1.86	3.29	1.04	1.01	1.46	0.80	0.50	0.82	0.24
	Q 0.0	0.015	0.015	0.568	0.417	0.0	0.006	0.003	0.014	0.002	0.010	0.0
STA AV	P 0.23	0.25	0.47	1.25	2.43	3.23	1.54	1.06	0.88	0.41	0.32	0.30
	Q 0.0	0.059	0.241	0.092	0.319	0.286	0.001	0.000	0.001	0.000	0.001	0.0
												12.39
												1.001

NOTES: Watershed conditions: 100% rangeland; Condition classes: excellent - 8%; good - 67%; fair - 25%; Degree of grazing: moderate. For map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1956-59, USDA Misc. Pub 945, p. 65.13-4. Thiessen weighted precipitation from gages W-13B and W-13C. Precipitation and runoff records began January 1958. Precipitation and runoff STA AV based on 13 yr (1958-70) record period. For long-time precipitation records, see National Weather Service records at Newell, South Dakota.

1970 DAILY PRECIPITATION (inches)												
NEWELL, SOUTH DAKOTA WATERSHED W-13												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.01S	0.0	0.0	0.0	0.0	0.0	0.0	0.65	0.0	0.0	0.0	0.0
2	0.01S	0.0	0.02S	0.0	0.0	0.0	0.0	0.0	0.33	0.0	0.0	0.0
3	0.0	0.06S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.0	0.0	0.33	0.0	0.0	0.0	0.0	0.0
6	0.0	0.0	0.0	0.0	0.0	0.0	0.04	0.78	0.09	0.0	0.0	0.0
7	0.0	0.0	0.0	0.0	0.29	0.0	0.0	0.0	0.06	0.0	0.30S	0.0
8	0.0	0.0	0.02S	0.0	1.09	0.0	0.0	0.0	0.0	0.0	0.02S	0.0
9	0.0	0.0	0.08S	0.0	0.06	0.01	0.0	0.0	0.05	0.0	0.0	0.13S
10	0.0	0.0	0.0	0.10	0.36	0.06	0.0	0.0	0.0	0.0	0.06S	0.06S
11	0.0	0.0	0.0	0.91	0.02	0.18	0.03	0.03	0.0	0.0	0.0	0.0
12	0.0	0.0	0.02S	0.09	0.03	0.70	0.0	0.0	0.0	0.15S	0.0	0.0
13	0.0	0.0	0.0	0.0	0.0	0.0	0.29	0.0	0.12	0.0	0.07S	0.0
14	0.0	0.0	0.0	0.08	0.53	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.03S	0.0	0.15	0.0	0.09	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.02	0.0	0.0	0.02S
17	0.0	0.07S	0.10S	0.26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.03S
18	0.04S	0.01S	0.02S	0.20	0.0	0.0	0.0	0.0	0.0	0.0	0.03S	0.0
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	0.0	0.02	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	0.0	0.0	0.07S	0.0	0.0	0.0	0.27	0.0	0.0	0.0	0.0	0.0
24	0.17S	0.0	0.02S	0.0	0.0	0.0	0.0	0.0	0.08	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.10S	0.19S	0.0
26	0.0	0.0	0.03S	0.0	0.0	0.0	0.0	0.0	0.0	0.21S	0.04S	0.0
27	0.0	0.0	0.0	0.02	0.03	0.0	0.0	0.0	0.0	0.0	0.11S	0.0
28	0.0	0.02S	0.15S	0.05	0.16	0.0	0.03	0.0	0.0	0.0	0.0	0.0
29	0.0	0.0	0.0	0.0	0.41	0.0	0.0	0.0	0.05S	0.04S	0.0	0.0
30	0.0	0.0	0.0	0.0	0.12	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	0.0	0.0	0.0	0.19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL	0.23	0.19	0.53	1.86	3.29	1.04	1.01	1.46	0.80	0.50	0.82	0.24
STA AV	0.23	0.25	0.47	1.25	2.43	3.23	1.54	1.06	0.88	0.41	0.32	0.30

NOTES: Thiessen weighted precipitation from gages W-13B and W-13C. STA AV based on 13 yr (1958-70) record period.

1970 MEAN DAILY DISCHARGE (cfs) NEWELL, SOUTH DAKOTA WATERSHED W-13												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.0	0.0	0.0	0.0	3.0	0.0	0.0	0.020	0.0	0.0	0.0	0.0
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.047	0.0	0.0	0.0
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.0	0.0	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6	0.0	0.0	0.0	0.639	0.0	0.0	0.0	0.0	0.0	0.0	0.013	0.0
7	0.0	0.0	0.101	0.0	0.0	3.0	0.0	0.0	0.013	0.0	0.027	0.0
8	0.0	0.0	0.0	0.0	1.022	0.0	0.0	0.0	0.0	0.0	0.020	0.0
9	0.0	0.0	0.0	0.0	0.713	0.0	0.0	0.0	0.013	0.0	3.0	0.0
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.007	0.0
11	0.0	0.0	0.0	0.0	0.592	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	0.0	0.0	0.0	3.0	0.0	0.0	0.0	0.0	0.0	0.007	0.0	3.0
13	0.0	0.0	0.0	0.0	0.0	0.0	0.020	0.0	0.020	0.0	0.0	0.0
14	0.0	0.0	0.0	3.0	0.457	0.0	0.0	3.0	0.0	3.0	3.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.0	0.0	0.0	0.0	3.0	0.0	0.0	0.0	0.0	0.0	0.0
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	0.0	0.0	0.0	3.0	0.0	0.0	0.0	3.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	0.0	0.0	0.0	1.620	0.0	0.0	0.020	0.0	0.0	0.0	0.0	0.0
24	0.0	0.0	0.0	1.035	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.524	0.0	0.0	0.0	0.0	0.0	0.007	0.0	0.0
26	0.0	0.101	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	0.0	0.0	0.0	3.0	0.0	3.0	0.0	3.0	0.0	3.0	0.0	0.0
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	0.0	0.0	0.0	3.0	0.020	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MEAN	0.0	0.0336	0.0033	0.1273	0.0904	0.0	0.0013	0.0007	0.0031	0.0004	0.0022	0.0
INCHES	0.0	0.015	0.015	0.568	0.417	0.0	0.006	0.003	0.014	0.002	0.016	0.0
STA AV	0.0	0.059	0.241	0.092	0.319	0.286	0.001	0.000	0.001	0.000	0.001	0.0

NOTES: STA AV based on 13 yr (1958-70) record period. To convert mean daily discharge in CFS to IN/DAY, multiply by 0.14876.

NEWELL, SOUTH DAKOTA WATERSHED W-14

LOCATION: Butte Co., South Dakota, 16 mi. SE of Newell, Belle Fourche River Watershed.

AREA: 35.00 acres

MONTHLY PRECIPITATION AND RUNOFF (inches)													NEWELL, SOUTH DAKOTA WATERSHED W-14	
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
1970	P	0.58	0.19	1.10	3.18	2.78	1.26	0.68	0.27	1.03	0.53	1.31	0.51	13.42
	Q	0.0	0.140	0.0	0.739	0.173	0.005	0.0	0.0	0.0	0.013	0.0	0.0	1.070
STA AV	P	0.40	0.34	0.71	1.81	2.34	3.05	1.93	0.97	1.10	0.49	0.45	0.43	14.02
	Q	0.071	0.050	0.253	0.194	0.241	0.294	0.145	0.016	0.007	0.0	0.008	0.0	1.280

NOTES: Watershed conditions: 100% rangeland; Condition classes: good - 54%; fair - 46%; Degree of grazing moderate. For map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1956-59, USDA Misc. Pub. 945, p. 65.14-4. Precipitation from rain gage W-14A. Precipitation and runoff records began January 1958. Precipitation and runoff STA AV based on 13 yr (1958-70) record period. For long-time precipitation records, see National Weather Service records at Newell, South Dakota.

1970 DAILY PRECIPITATION (inches)													NEWELL, SOUTH DAKOTA WATERSHED W-14	
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
1	0.12S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	0.06S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.35	0.0	0.07S	0.0	0.0	0.0
3	0.0	0.01S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4	0.0	0.0	0.0	0.0	0.0	0.0	0.02	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.03	0.0	0.05	0.11	0.0	0.0	0.0	0.0	0.0	0.0
6	0.08S	0.0	0.0	0.0	0.0	0.0	0.0	0.16	0.18	0.03S	0.0	0.0	0.0	0.0
7	0.0	0.0	0.0	0.0	0.05	0.0	0.0	0.0	0.07	0.0	0.22S	0.0	0.0	0.0
8	0.0	0.0	0.07S	0.0	0.44	0.0	0.03	0.0	0.0	0.0	0.15S	0.0	0.0	0.0
9	0.0	0.0	0.25S	0.0	0.11	0.04	0.01	0.0	0.0	0.0	0.0	0.0	0.10S	0.0
10	0.0	0.0	0.10S	0.18S	0.30	0.10	0.0	0.0	0.0	0.0	0.06S	0.29S	0.0	0.0
11	0.0	0.0	0.05S	1.22S	0.05	0.09	0.10	0.0	0.0	0.08S	0.04S	0.0	0.0	0.0
12	0.0	0.0	0.03S	0.20S	0.05	1.03	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13	0.0	0.0	0.0	0.0	0.20	0.0	0.02	0.0	0.15S	0.0	0.26S	0.0	0.0	0.0
14	0.0	0.05S	0.0	0.05S	0.63	0.0	0.0	0.0	0.10S	0.0	0.0	0.0	0.0	0.0
15	0.0	0.03S	0.0	0.32S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.01S	0.07S	0.23S	0.18S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	0.06S	0.03S	0.03S	0.53S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.02S	0.0
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.01S	0.0	0.0	0.0
20	0.06S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.02S	0.0	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.0	0.02	0.0	0.0	0.0	0.0	0.0	0.0	0.08S	0.0	0.0
23	0.0	0.0	0.0	0.0	0.0	0.0	0.40	0.0	0.0	0.0	0.0	0.02S	0.0	0.0
24	0.09S	0.0	0.10S	0.0	0.05	0.0	0.0	0.0	0.18S	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.05S	0.05S	0.0	0.0	0.0
26	0.0	0.0	0.10S	0.0	0.0	0.0	0.0	0.0	0.0	0.16S	0.22S	0.0	0.0	0.0
27	0.07S	0.0	0.14S	0.0	0.0	0.0	0.0	0.0	0.0	0.15S	0.18S	0.0	0.0	0.0
28	0.03S	0.0	0.0	0.30	0.0	0.0	0.05	0.0	0.0	0.02S	0.0	0.0	0.0	0.0
29	0.0	0.0	0.0	0.20	0.68	0.0	0.0	0.0	0.0	0.04S	0.03S	0.0	0.0	0.0
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	0.0	0.0	0.0	0.0	0.17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL		0.58	0.19	1.10	3.18	2.78	1.26	0.68	0.27	1.03	0.53	1.31	0.51	
STA AV		0.40	0.34	0.71	1.81	2.34	3.05	1.93	0.97	1.10	0.49	0.45	0.43	

NOTES: Precipitation from rain gage W-14A. STA AV based on 13 yr (1958-70) record period.

1970 MEAN DAILY DISCHARGE (cfs) NEWELL, SOUTH DAKOTA WATERSHED W-14												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11	0.0	0.0	0.0	0.134	0.057	0.0	0.0	0.0	0.0	0.0	0.003T	0.0
12	0.0	0.0	0.0	0.059	0.0	0.007	0.0	0.0	0.0	0.0	0.0	0.0
13	0.0	0.0	0.0	0.009	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	0.0	0.0	0.0	0.010	0.197	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.081	0.0	0.019	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0	0.049	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.0	0.0	0.015	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	0.0	0.0	0.0	0.066	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	0.0	0.0	0.0	0.032	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.0	0.013	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.0	0.066	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.160	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	0.0	0.0	0.0	0.415	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	0.0	0.0	0.0	0.043	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	0.0	0.125	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.016	0.0
30	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	0.0		0.0		0.0		0.0	0.0		0.0		0.0
MEAN	0.0	0.0074	0.0	0.0362	0.0082	0.0002	0.0	0.0	0.0	0.0	0.0006	0.0
INCHES	0.0	0.140	0.0	0.739	0.173	0.005	0.0	0.0	0.0	0.0	0.013	0.0
STA AV	0.071	0.050	0.253	0.194	0.241	0.294	0.145	0.016	0.007	0.0	0.008	0.0

NOTES: STA AV based on 13 yr (1958-70) record period. To convert mean daily discharge in CFS to IN/DAY, multiply by 0.68005.

NEWELL, SOUTH DAKOTA WATERSHED W-15

LOCATION: Butte Co., South Dakota, 16 mi. SE of Newell, Belle Fourche River Watershed.

AREA: 115.00 acres

MONTHLY PRECIPITATION AND RUNOFF (inches)							NEWELL, SOUTH DAKOTA WATERSHED W-15							
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
1970	P	0.39	0.15	0.66	2.56	2.59	1.05	0.76	0.30	0.95	0.48	1.00	0.30	11.19
	Q	0.0	0.032	0.0	1.203	0.293	0.014	0.0	0.0	0.012	0.0	0.010	0.0	1.564
STA AV	P	0.41	0.29	0.67	1.78	2.40	3.07	2.00	0.95	1.08	0.52	0.43	0.37	13.95
	Q	0.059	0.021	0.131	0.232	0.319	0.249	0.155	0.007	0.008	0.0	0.008	0.0	1.190

NOTES: Watershed conditions: 100% rangeland; Condition classes: good - 41%; fair - 59%; Degree of grazing: moderate. For map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1956-59, USDA Misc. Pub 945, p. 65.15-4. Precipitation from rain gage W-15A. Precipitation and runoff records began January 1958. Precipitation and runoff STA AV based on 13 yr (1958-70) record period. For long-time precipitation records, see National Weather Service records at Newell, South Dakota.

1970		DAILY PRECIPITATION (inches)					NEWELL, SOUTH DAKOTA WATERSHED W-15						
Day		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.02S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	0.03S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.36	0.0	0.07S	0.0
3	0.0	0.02S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.01	0.0	0.0	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.07	0.10	0.0	0.0	0.0	0.0
6	0.07S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.20	0.18	0.03S	0.0	0.0
7	0.0	0.0	0.0	0.0	0.0	0.02	0.0	0.0	0.0	0.08	0.0	0.22S	0.0
8	0.0	0.0	0.07S	0.0	0.0	0.42	0.0	0.03	0.0	0.0	0.0	0.10S	0.0
9	0.0	0.0	0.10S	0.0	0.0	0.12	0.01	0.01	0.0	0.0	0.0	0.0	0.05S
10	0.0	0.0	0.07S	0.35S	0.42	0.08	0.0	0.0	0.0	0.0	0.0	0.06S	0.09S
11	0.0	0.0	0.03S	1.04S	0.02	0.20	0.19	0.0	0.0	0.0	0.08S	0.02S	0.0
12	0.0	0.0	0.04S	0.12S	0.02	0.76	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13	0.0	0.0	0.0	0.0	0.12	0.0	0.02	0.0	0.0	0.13S	0.0	0.16S	0.0
14	0.0	0.03S	0.0	0.05S	0.64	0.0	0.0	0.0	0.0	0.02S	0.0	0.0	0.0
15	0.0	0.02S	0.0	0.17S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.01S	0.07S	0.10S	0.11S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	0.06S	0.01S	0.05S	0.47S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.02S
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.01S	0.0
20	0.06S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.01S	0.0
22	0.0	0.0	0.0	0.0	0.0	0.01	0.0	0.0	0.0	0.0	0.0	0.0	0.12S
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.40	0.0	0.0	0.0	0.0	0.02S
24	0.08S	0.0	0.06S	0.0	0.02	0.0	0.0	0.0	0.0	0.18S	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.03S	0.19S	0.0
26	0.0	0.0	0.05S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.13S	0.02S	0.0
27	0.03S	0.0	0.09S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.15S	0.11S	0.0
28	0.03S	0.0	0.0	0.10	0.0	0.0	0.03	0.0	0.0	0.0	0.02S	0.03S	0.0
29	0.0	0.0	0.0	0.15	0.60	0.0	0.0	0.0	0.0	0.0	0.04S	0.0	0.0
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	0.0	0.0	0.0	0.18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL		0.39	0.15	0.66	2.56	2.59	1.05	0.76	0.30	0.95	0.48	1.00	0.30
STA AV		0.41	0.29	0.67	1.78	2.40	3.07	2.00	0.95	1.08	0.52	0.43	0.37

NOTES: Precipitation from rain gage W-15A. STA AV based on 13 yr (1958-70) record period.

1970 MEAN DAILY DISCHARGE (cfs) NEWELL, SOUTH DAKOTA WATERSHED W-15												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.048	0.0
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.010	0.0	0.0	0.0
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11	0.0	0.0	0.0	1.237	0.155	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	0.0	0.0	0.0	0.285	0.0	0.068	0.0	0.0	0.0	0.0	0.0	0.0
13	0.0	0.0	0.0	0.368	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	0.0	0.0	0.0	0.024	1.261	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.058	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.116	0.0	0.251	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.0	0.0	0.024	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	0.0	0.0	0.0	0.338	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	0.0	0.0	0.0	0.111	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.0	0.053	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.0	2.227	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.570	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	0.0	0.0	0.0	0.435	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	0.0	0.0	0.0	0.130	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	0.0	0.039	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.048	0.0	0.0	0.0
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MEAN	0.0	0.0055	0.0	0.1937	0.0457	0.0023	0.0	0.0	0.0019	0.0	0.0016	0.0
INCHES	0.0	0.032	0.0	1.203	0.293	0.014	0.0	0.0	0.012	0.0	0.010	0.0
STA AV	0.059	0.021	0.131	0.232	0.319	0.249	0.155	0.007	0.308	0.0	0.008	0.0

NOTES: STA AV based on 13 yr (1958-70) record period. To convert mean daily discharge in CFS to IN/DAY, multiply by 0.20697.

NORTH DANVILLE, VERMONT WATERSHED W-1

LOCATION: Caledonia County, Vermont, 5 mi. NW of St. Johnsbury; Sleepers River, Connecticut River Basin.

AREA: 10611.20 acres 16.58 sq. miles

MONTHLY PRECIPITATION AND RUNOFF (inches)														NORTH DANVILLE, VERMONT WATERSHED W-1															
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual															
1970	P	1.49	4.09	3.32	4.36	4.23	4.46	1.74	5.49	3.97	2.69	3.15	5.85	44.84															
	Q	0.983	2.037	0.850	6.376	2.594	0.912	0.423	0.175	0.222	0.308	0.526	0.593	16.000															
STA AV	P	2.74	3.34	3.28	3.70	3.78	4.13	3.72	4.56	3.27	4.14	4.66	3.99	45.31															
	Q	0.879	0.901	1.559	6.296	2.667	0.981	0.537	0.451	0.407	1.186	1.538	1.318	18.719															
ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																													
		Maximum Discharge		1 Hour		2 Hours		Maximum Volume for Selected Time Interval		6 Hours		12 Hours		1 Day		2 Days		8 Days											
		Date	Rate	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.										
1970		4-24	0.045	4-24	0.045	4-24	0.089	4-24	0.252	4-24	0.435	4-24	0.651	4-24	0.979	4-21	2.682												
MAXIMUMS FOR PERIOD OF RECORD																													
		10-24	0.100	10-24	0.100	10-24	0.200	10-24	0.500	10-24	0.780	10-24	1.150	10-24	1.450	4-12	3.860												
		1959		1959		1959		1959		1959		1959		1959		1960													

NOTES: Watershed conditions: Predominately hardwood forest, 64%; cultivated-16% in long hay rotations and about 1% in row crops, total 17%; pasture, largely bluegrass 15%; idle land in grass and woody plants, 3%; and homesites and roads, 1%. For map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1956-59, USDA Misc. Pub. 945, p. 67.1-4. Precipitation records began January 1, 1959. Runoff records began October 1959. Part year values not included in STA AV. For long-time precipitation records, see National Weather Service records at St. Johnsbury, Vt.

1970 DAILY AIR TEMPERATURE (degrees F)													NORTH DANVILLE, VERMONT WATERSHED W-1												
Day	Jan max min	Feb max min	Mar max min	Apr max min	May max min	Jun max min	Jul max min	Aug max min	Sep max min	Oct max min	Nov max min	Dec max min													
1	12 -9	40 10	26 14	40 14	84 51	81 65	76 52	79 62	56 40	54 35	58 30	39 22													
2	10 -12	42 22	32 14	34 27	74 46	68 62	62 58	83 60	62 40	53 34	66 34	56 36													
3	14 -10	40 10	30 6	34 24	46 32	74 51	76 58	74 55	60 32	61 46	50 28	45 30													
4	10 -14	10 -20	33 -2	34 18	62 27	68 46	74 62	66 47	76 54	52 34	53 28	34 12													
5	6 -18	12 -21	31 24	32 11	66 40	68 48	70 56	72 42	70 54	49 30	41 30	25 11													
6	17 0	32 11	24 20	38 4	40 28	68 50	76 53	76 50	56 51	59 24	42 32	23 14													
7	-12 -8	31 8	32 15	42 25	40 26	68 48	79 47	78 46	60 50	72 50	51 28	13 -2													
8	-12 -15	37 8	25 8	52 24	55 34	80 46	82 52	82 48	60 48	76 46	46 22	11 -6													
9	10 -8	34 7	20 5	58 33	60 44	82 51	84 58	84 49	57 49	77 44	49 18	23 2													
10	7 2	37 29	21 8	38 27	79 41	82 50	81 58	86 53	67 56	72 43	48 32	30 15													
11	5 -14	42 20	25 17	30 20	70 52	80 56	80 62	79 52	64 42	58 54	54 49	16 0													
12	5 -18	18 0	33 20	40 26	62 43	70 45	74 49	76 60	70 36	64 56	51 41	12 -6													
13	7 1	5 -13	30 20	44 25	65 43	60 37	70 46	85 54	71 42	62 56	50 40	20 9													
14	1 -8	11 -17	30 20	56 20	60 41	72 32	76 44	86 56	61 42	70 58	43 38	20 11													
15	4 -13	18 -10	29 6	52 24	61 30	77 38	72 60	88 58	47 43	61 46	38 32	18 -7													
16	8 -17	20 2	26 -2	58 24	57 46	76 46	74 62	88 58	70 46	45 30	34 22	17 -11													
17	27 11	29 -4	32 16	59 39	50 44	78 51	79 56	78 60	60 40	34 28	38 25	29 12													
18	14 -15	35 9	44 9	41 28	53 43	76 62	77 54	70 50	54 48	52 29	38 28	24 17													
19	1 -20	31 -2	48 10	40 23	70 44	76 55	70 42	78 42	66 43	45 24	45 33	30 18													
20	10 -24	18 -10	46 15	37 20	64 42	54 48	76 56	73 61	72 42	52 18	52 42	28 8													
21	-2 -12	20 4	34 30	40 30	70 35	70 45	68 53	70 53	69 42	52 26	52 41	14 -14													
22	1 -18	34 8	44 28	46 32	70 44	70 48	72 45	69 45	84 61	56 44	49 38	4 -20													
23	4 -22	25 -2	34 28	42 28	60 41	74 46	84 48	60 54	72 52	58 50	50 13	18 4													
24	10 -10	20 -2	38 28	42 36	54 36	82 44	86 51	69 48	72 48	56 49	20 7	23 8													
25	14 -2	26 -4	36 24	50 30	46 34	62 44	88 56	73 48	81 58	50 44	24 14	19 -6													
26	26 11	4 -17	38 16	68 26	60 43	68 35	84 64	80 52	76 52	50 40	28 8	21 10													
27	22 6	19 -15	36 28	75 35	60 41	54 45	88 60	68 48	64 40	50 24	33 24	17 13													
28	27 4	30 13	38 16	72 36	58 36	67 39	88 59	71 48	54 33	54 18	34 32	12 8													
29	44 27		24 10	70 40	69 29	72 38	85 64	68 51	50 41	54 20	34 32	14 4													
30	30 -4		33 6	72 36	75 38	62 56	88 60	65 41	50 36	52 20	39 32	9 2													
31	21 -10		36 8		84 43		80 68	62 48		52 20		24 0													
AV.	13 -7	24 1	33 15	46 25	62 39	69 46	78 55	75 52	62 44	57 37	42 28	22 6													
MEAN	2.5	12.4	23.8	35.9	50.7	57.8	66.7	63.5	53.1	46.7	35.2	14.3													
SEA AV	22 3	23 3	34 15	46 27	58 37	71 46	74 52	72 49	64 42	53 34	38 23	24 9													

NOTES: Temperature data is from R-12 station. Readings taken daily from hygrothermograph charts. STA AV based on 1960-70 record period.

1970	DAILY PRECIPITATION (inches)					NORTH DANVILLE, VERMONT WATERSHED W-1						
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.0	0.0	0.0	0.0	0.0	0.13	0.0	1.44	0.12	0.02	0.0	0.0
2	0.0	0.77	0.08	1.59	0.09	0.0	0.15	0.21	0.0	0.0	0.0	0.08
3	0.0	0.70	0.0	0.56	0.37	0.09	0.0	0.26	0.42	0.43	0.0	0.0
4	0.0	0.29	0.11	0.0	0.0	0.0	0.47	0.0	0.53	0.05	0.0	1.24
5	0.01	0.0	0.11	0.0	0.19	0.85	0.02	0.0	0.40	0.06	0.0	0.10
6	0.13	0.0	0.0	0.0	0.22	0.18	0.02	0.0	0.34	0.0	0.14	0.39
7	0.0	0.0	0.05	0.0	0.17	0.0	0.0	0.0	0.01	0.0	0.0	0.0
8	0.02	0.0	0.25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.03
9	0.12	0.0	0.02	0.0	0.12	0.0	0.0	0.0	0.0	0.0	0.0	0.85
10	0.08	0.05	0.12	0.0	0.42	0.0	0.09	0.04	0.17	0.0	0.05	0.06
11	0.04	0.71	0.10	0.0	0.45	0.25	0.06	0.01	0.0	0.11	0.36	0.0
12	0.03	0.16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13	0.12	0.02	0.35	0.0	0.0	0.0	0.0	0.0	0.0	0.11	0.0	0.31
14	0.06	0.0	0.15	0.0	0.0	0.0	0.0	0.0	0.0	0.21	0.05	0.09
15	0.0	0.45	0.39	0.0	0.0	0.0	0.0	0.30	0.63	0.64	0.03	0.03
16	0.0	0.04	0.01	0.0	0.05	0.0	0.20	0.0	0.19	0.13	0.01	0.0
17	0.05	0.0	0.0	0.36	1.17	0.0	0.02	0.0	0.05	0.05	0.02	0.73
18	0.09	0.0	0.0	0.08	0.0	0.13	0.71	0.0	0.0	0.13	0.0	0.08
19	0.0	0.14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.23	0.21
20	0.0	0.0	0.30	0.22	0.0	0.0	0.0	0.54	0.0	0.0	0.22	0.09
21	0.05	0.05	0.46	0.26	0.0	0.0	0.0	0.14	0.0	0.0	0.39	0.05
22	0.01	0.11	0.08	0.0	0.51	0.09	0.0	0.0	0.30	0.19	0.04	0.51
23	0.07	0.11	0.23	0.0	0.0	0.0	0.0	1.25	0.05	0.52	0.32	0.03
24	0.0	0.09	0.21	1.29	0.0	0.0	0.0	0.01	0.0	0.05	0.02	0.73
25	0.08	0.24	0.16	0.0	0.10	0.07	0.0	0.07	0.0	0.0	0.03	0.0
26	0.21	0.0	0.09	0.0	0.37	0.20	0.0	0.14	0.0	0.0	0.01	0.09
27	0.0	0.04	0.17	0.0	0.0	1.16	0.0	0.0	0.79	0.0	0.0	0.09
28	0.19	0.12	0.18	0.0	0.0	0.0	0.0	1.21	0.08	0.0	0.45	0.03
29	0.23	0.0	0.0	0.0	0.0	0.33	0.0	0.0	0.20	0.0	0.05	0.03
30	0.0	0.0	0.0	0.0	0.0	0.98	0.0	0.05	0.02	0.0	0.12	0.0
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.12	0.0	0.0	0.0	0.0
TOTAL	1.49	4.09	3.32	4.36	4.23	4.46	1.74	5.49	3.97	2.69	3.15	5.85
STA AV	2.74	3.34	3.28	3.70	3.78	4.13	3.72	4.56	3.27	4.14	4.66	3.99

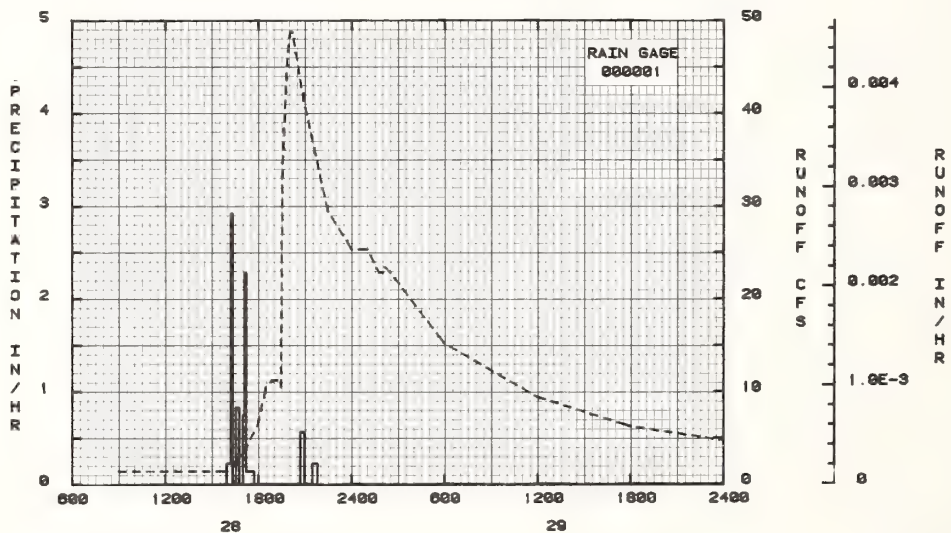
NOTES: Daily precipitation values from rain gage R-01. All precipitation is rain except for the months of January, February, and December during which all precipitation is snow or rain on snow. STA AV based on 12 yr (1959-70) record period.

1970	MEAN DAILY DISCHARGE (cfs)					NORTH DANVILLE, VERMONT WATERSHED W-1						
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	22.05	13.81	8.66	14.36	70.96	12.96	33.70	2.07	2.18	2.95	3.59	12.86
2	20.72	17.22	8.75	19.03	58.58	13.12	13.12	6.14	1.74	2.59	3.59	12.51
3	19.17	257.49	8.66	55.54	72.17	11.01	13.41	2.78	1.63	4.96	3.44	13.21
4	18.35	164.42	8.92	42.95	50.24	10.82	12.67	2.27	9.12	5.77	3.39	10.32
5	17.30	56.05	9.01	23.92	41.35	13.97	23.09	1.76	12.77	3.98	3.39	7.99
6	17.04	44.39	9.01	21.51	47.83	78.95	10.57	1.63	6.46	3.37	3.39	8.34
7	16.66	28.82	9.14	22.49	42.46	27.50	6.87	1.21	4.51	4.09	3.39	7.13
8	15.92	20.18	9.36	28.81	35.39	17.77	6.24	1.01	3.24	2.68	3.39	6.14
9	14.83	16.98	9.09	61.43	31.25	13.32	4.62	0.94	2.79	2.45	3.39	6.42
10	14.14	15.49	8.88	83.25	41.71	10.91	4.02	0.79	3.05	2.20	3.39	7.29
11	13.85	27.45	8.66	46.74	45.32	9.58	4.95	0.84	3.05	2.34	6.30	7.06
12	14.42	49.26	8.66	53.38	46.06	9.22	4.25	0.87	2.38	2.63	6.98	6.84
13	15.97	25.00	8.66	68.25	32.40	7.29	3.01	0.78	2.06	2.68	5.47	6.77
14	13.34	16.97	8.66	95.94	27.40	6.61	2.83	0.76	1.82	4.02	4.78	6.99
15	12.02	14.74	8.66	116.67	22.89	6.01	2.86	0.69	1.64	7.09	7.97	6.84
16	12.91	13.27	8.66	124.44	21.38	5.65	3.76	0.66	3.75	9.23	11.46	6.61
17	12.91	12.12	8.66	175.23	95.80	5.47	4.16	0.54	3.00	5.73	8.62	6.93
18	12.59	12.06	8.79	198.74	61.48	6.21	4.27	0.55	2.54	4.53	6.89	7.64
19	12.48	11.35	9.64	111.31	35.60	5.98	5.87	0.55	2.65	3.61	7.26	8.07
20	12.06	11.11	11.83	92.85	27.23	4.93	3.44	0.61	1.96	3.25	11.50	8.16
21	11.05	11.25	15.80	90.88	21.87	4.78	3.11	2.67	1.53	3.06	25.16	8.16
22	10.56	10.85	18.40	108.86	24.89	4.84	2.84	1.48	2.16	3.08	15.11	8.52
23	11.05	10.56	20.92	98.25	29.99	4.82	2.48	6.66	2.35	12.76	13.55	9.01
24	10.66	10.18	18.03	228.28	20.25	3.79	2.03	6.12	1.75	9.27	9.46	9.41
25	10.75	10.04	18.67	198.17	18.00	3.05	1.79	2.52	1.69	6.05	5.88	9.86
26	10.48	9.36	15.61	148.99	33.93	3.47	1.79	1.93	1.87	4.56	5.89	9.72
27	9.27	9.01	22.81	168.47	35.49	30.74	1.74	1.86	2.59	3.95	6.68	9.72
28	9.96	8.75	20.61	147.22	20.69	14.06	1.41	8.61	4.71	3.59	10.39	9.36
29	11.88	17.87	111.03	16.64	7.46	1.48	11.66	3.96	3.59	17.36	8.75	8.92
30	16.64	15.89	85.13	14.50	52.27	1.25	4.42	3.96	3.59	13.41	8.92	8.92
31	18.47	14.94	12.76	1.03	2.68	1.03	2.68	3.59	3.59	3.59	9.01	9.01
MEAN	14.132	32.434	12.226	94.736	37.306	13.552	6.087	2.517	3.297	4.427	7.816	8.534
INCHES	0.983	2.037	0.850	6.376	2.594	0.912	0.423	0.175	0.222	0.308	0.526	0.593
STA AV	0.879	0.901	1.559	6.296	2.667	0.981	0.537	0.451	0.407	1.186	1.538	1.318

NOTES: To convert mean daily discharge in CFS to IN/DAY, multiply by 0.002243. STA AV based on 11 yr (1960-70) record period.

1970 SELECTED RUNOFF EVENT			NORTH DANVILLE, VERMONT WATERSHED W-1							
ANTECEDENT CONDITIONS			RAINFALL				RUNOFF			
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)
EVENT OF AUGUST 28 - 29, 1970										
8-28	BG 000001			BG 000001						
	0.0	0.001	8-28	1557	0.0	0.0	8-28	900	1.421	0.0
				1613	0.2250	0.06		1559	1.421	0.0009
				1621	2.9250	0.45		1637	2.511	0.0010
				1634	0.0	0.45		1706	3.587	0.0011
				1647	0.8308	0.63		1758	6.478	0.0015
WATERSHED CONDITIONS: Forest land, 64%; hay, 16%; pastured land, 15%; idle land with dense grass and brush growth, 3%; seeded to corn, 1%; and homesites, 1%.				1700	0.0	0.63		1829	10.465	0.0019
				1708	0.7501	0.73		1852	11.244	0.0023
				1713	2.2802	0.92		1914	11.244	0.0027
				1744	0.1355	0.99		1928	10.465	0.0029
				2042	0.0	0.99		1932	33.139	0.0030
				2058	0.5625	1.14		1951	45.911	0.0042
				2129	0.0	1.14		2002	48.774	0.0050
				2148	0.2210	1.21		2011	48.774	0.0057
								2055	41.372	0.0088
								2228	29.431	0.0139
							8-29	2400	25.330	0.0178
								101	25.330	0.0202
								146	22.801	0.0219
								200	22.801	0.0224
								209	23.418	0.0227
								230	22.801	0.0235
								559	15.184	0.0297
								1200	9.359	0.0366
								1759	6.197	0.0409
								2400	4.666	0.0440

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.0000935. For 30-day antecedent rainfall and runoff, see tables of daily values.



EVENT OF AUGUST 28 - 29, 1970
NORTH DANVILLE, VERMONT WATERSHED W-1

NORTH DANVILLE, VERMONT WATERSHED W-2

LOCATION: Caledonia County, Vermont; 5 mi. NW of St. Johnsbury; unnamed tributary of Sleepers River, Connecticut River basin.

AREA: 146.00 acres

MONTHLY PRECIPITATION AND RUNOFF (inches)														NORTH DANVILLE, VERMONT WATERSHED W-2																	
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual																	
1970	P	0.92	2.64	1.93	3.77	3.05	3.87	1.54	4.84	2.36	1.71	2.44	4.15	33.22																	
	Q	0.554	0.619	0.532	1.247	0.778	0.425	0.235	0.181	0.157	0.199	0.166	0.0	5.065																	
STA AV	P	1.88	2.20	2.26	2.98	3.12	3.39	3.17	3.91	2.57	3.37	3.60	3.10	35.55																	
	Q	0.688	0.636	1.594	2.998	1.703	0.861	0.494	0.379	0.307	0.598	0.914	0.982	12.154																	
ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																															
		Maximum Discharge		1 Hour		2 Hours		Maximum Volume for Selected Time Interval										2 Days		8 Days											
		Date	Rate	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.														
1970		6-27	0.005	6-27	0.005	6-27	0.009	4-16	0.020	4-16	0.038	4-18	0.072	4-18	0.130	4-18	0.451														
MAXIMUMS FOR PERIOD OF RECORD																															
		3- 5	0.080	3- 5	0.080	3- 5	0.160	3- 5	0.390	3- 5	0.580	3- 6	0.830	3-30	1.140	3-28	2.540														
		1964		1964		1964		1964		1964		1964		1962		1962															

NOTES: Watershed conditions: Pasture of mostly bluegrass, 38%; cultivated land entirely in clover and orchard grass hay, 37%; and forest stand, predominantly hardwoods, 25%. For map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1956-59, USDA Misc. Pub. 945, p. 67.2-4. Precipitation records began Sept. 1958. Runoff records began October 1958. Part-year values not included in station average. For long-time precipitation records, see National Weather Service records at St. Johnsbury, Vt.

1970 DAILY PRECIPITATION (inches)														NORTH DANVILLE, VERMONT WATERSHED W-2													
	Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec														
	1	0.0	0.0	0.0	0.0	0.0	0.36	0.0	0.69	0.09	0.0	0.0	0.03														
	2	0.0	0.70	0.04	1.50	0.10	0.0	0.10	0.26	0.0	0.0	0.0	0.09														
	3	0.0	0.64	0.0	0.08	0.26	0.0	0.0	0.25	0.38	0.33	0.0	0.0														
	4	0.0	0.21	0.16	0.0	0.0	0.3	0.48	0.01	0.47	0.02	0.0	0.94														
	5	0.0	0.0	0.15	0.0	0.10	1.13	0.0	0.0	0.09	0.0	0.0	0.07														
	6	0.02	0.0	0.0	0.0	0.10	0.18	0.0	0.0	0.08	0.0	0.0	0.29														
	7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0														
	8	0.0	0.0	0.05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.01														
	9	0.0	0.0	0.02	0.0	0.05	0.0	0.0	0.0	0.0	0.0	0.0	0.69														
	10	0.07	0.04	0.03	0.0	0.28	0.0	0.04	0.15	0.15	0.0	0.05	0.05														
	11	0.01	0.20	0.01	0.0	0.24	0.12	0.30	0.01	0.01	0.10	0.29	0.0														
	12	0.02	0.06	0.0	0.0	0.01	0.0	0.0	0.03	0.0	0.0	0.0	0.0														
	13	0.96	0.0	0.36	0.0	0.0	0.0	0.0	0.0	0.0	0.05	0.0	0.26														
	14	0.0	0.0	0.05	0.0	0.0	0.0	0.0	0.0	0.0	0.18	0.01	0.09														
	15	0.0	0.35	0.01	0.0	0.0	0.0	0.0	0.0	0.20	0.38	0.56	0.02														
	16	0.0	0.0	0.0	0.0	0.02	0.0	0.19	0.0	0.16	0.04	0.04	0.02														
	17	0.01	0.03	0.0	0.35	1.14	0.0	0.01	0.0	0.0	0.08	0.0	0.43														
	18	0.06	0.0	0.0	0.01	0.0	0.10	0.37	0.0	0.05	0.0	0.0	0.16														
	19	0.0	0.07	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.18	0.04														
	20	0.02	0.0	0.17	0.27	0.0	0.0	0.0	0.36	0.0	0.0	0.20	0.02														
	21	0.03	0.02	0.35	0.27	0.0	0.0	0.0	0.26	0.0	0.0	0.29	0.0														
	22	0.0	0.04	0.01	0.0	0.29	0.10	0.0	0.0	0.11	0.17	0.08	0.43														
	23	0.03	0.03	0.08	0.0	0.0	0.0	0.0	1.05	0.0	0.33	0.19	0.06														
	24	0.0	0.04	0.07	1.29	0.0	0.04	0.0	0.0	0.0	0.03	0.0	0.45														
	25	0.06	0.13	0.06	0.0	0.05	0.03	0.0	0.0	0.04	0.0	0.0	0.0														
	26	0.21	0.0	0.08	0.0	0.41	0.19	0.0	0.17	0.01	0.0	0.0	0.0														
	27	0.03	0.04	0.08	0.0	0.0	1.03	0.0	0.0	0.32	0.0	0.0	0.0														
	28	0.15	0.04	0.11	0.9	0.0	0.0	0.0	1.47	0.04	0.0	0.42	0.0														
	29	0.14	0.0	0.0	0.0	0.0	0.22	0.05	0.0	0.16	0.0	0.03	0.0														
	30	0.0	0.0	0.0	0.0	0.0	0.67	0.0	0.05	0.0	0.0	0.10	0.0														
	31	0.0	0.0	0.04	0.0	0.0	0.0	0.0	0.08	0.0	0.0	0.0	0.0														
TOTAL		0.92	2.64	1.93	3.77	3.05	3.87	1.54	4.84	2.36	1.71	2.44	4.15														
STA AV		1.88	2.20	2.26	2.98	3.12	3.39	3.17	3.91	2.57	3.37	3.60	3.10														

NOTES: For temperature data see table of daily maximum and minimum values included with information for Watershed 67.001. Daily precipitation values from rain gage B-10. All precipitation is rain except for the months of December, January, and February, during which all precipitation is snow or rain on snow. STA AV based on 12 yr (1959-70) record period.

1970 MEAN DAILY DISCHARGE (cfs) NORTH DANVILLE, VERMONT WATERSHED W-2												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.131	0.094	0.099	0.114	0.223	0.039	0.099	0.058	0.034	0.033	0.028	0.0
2	0.129	0.130	0.099	0.139	0.219	0.075	0.077	0.074	0.026	0.031	0.028	0.0
3	0.126	0.259	0.099	0.227	0.283	0.101	0.076	0.044	0.032	0.065	0.028	0.0
4	0.115	0.209	0.095	0.153	0.213	0.092	0.098	0.041	0.110	0.049	0.028	0.0
5	0.119	0.162	0.094	0.141	0.198	0.125	0.096	0.032	0.061	0.038	0.028	0.0
6	0.119	0.144	0.094	0.139	0.206	0.183	0.061	0.027	0.047	0.033	0.027	0.0
7	0.119	0.135	0.094	0.162	0.183	0.117	0.052	0.023	0.038	0.030	0.026	0.0
8	0.119	0.129	0.088	0.196	0.175	0.099	0.048	0.021	0.034	0.030	0.026	0.0
9	0.115	0.125	0.088	0.192	0.169	0.091	0.045	0.018	0.030	0.027	0.025	0.0
10	0.115	0.127	0.088	0.288	0.197	0.087	0.043	0.018	0.024	0.026	0.030	0.0
11	0.115	0.251	0.088	0.243	0.202	0.079	0.055	0.022	0.016	0.035	0.053	0.0
12	0.112	0.173	0.088	0.234	0.174	0.084	0.043	0.024	0.009	0.033	0.040	0.0
13	0.114	0.147	0.087	0.273	0.159	0.074	0.037	0.021	0.006	0.034	0.037	0.0
14	0.109	0.130	0.084	0.263	0.147	0.070	0.042	0.019	0.009	0.048	0.034	0.0
15	0.109	0.125	0.084	0.288	0.139	0.067	0.041	0.018	0.014	0.071	0.066	0.0
16	0.104	0.125	0.084	0.307	0.139	0.057	0.056	0.015	0.033	0.053	0.066	0.0
17	0.103	0.122	0.084	0.303	0.205	0.068	0.047	0.015	0.015	0.043	0.049	0.0
18	0.103	0.119	0.084	0.205	0.182	0.072	0.049	0.014	0.031	0.039	0.044	0.0
19	0.103	0.119	0.088	0.432	0.153	0.065	0.043	0.016	0.030	0.035	0.048	0.0
20	0.103	0.118	0.092	0.374	0.139	0.063	0.032	0.018	0.024	0.032	0.045	0.0
21	0.100	0.115	0.106	0.358	0.127	0.059	0.033	0.057	0.023	0.031	0.078	0.0
22	0.099	0.115	0.117	0.361	0.152	0.063	0.036	0.024	0.036	0.035	0.047	0.0
23	0.095	0.115	0.115	0.309	0.134	0.054	0.032	0.120	0.025	0.081	0.058	0.0
24	0.094	0.108	0.126	0.282	0.119	0.044	0.031	0.051	0.022	0.049	0.041	0.0
25	0.094	0.103	0.117	0.366	0.124	0.045	0.028	0.036	0.032	0.042	0.038	0.0
26	0.094	0.103	0.134	0.297	0.193	0.046	0.028	0.029	0.033	0.039	0.0	0.0
27	0.094	0.099	0.146	0.275	0.066	0.217	0.024	0.034	0.046	0.036	0.0	0.0
28	0.094	0.099	0.120	0.260	0.040	0.079	0.023	0.079	0.037	0.032	0.0	0.0
29	0.128		0.116	0.241	0.040	0.062	0.024	0.067	0.048	0.031	0.0	0.0
30	0.117		0.107	0.231	0.036	0.234	0.023	0.040	0.039	0.030	0.0	0.0
31	0.099		0.104		0.036		0.023	0.038		0.030		0.0
MEAN	0.1097	0.1357	0.0993	0.2550	0.1540	0.0870	0.0466	0.0359	0.0320	0.0394	0.0339	0.0
INCHES	0.554	0.619	0.502	1.247	0.778	0.425	0.235	0.181	0.157	0.199	0.166	0.0
STA AV	0.688	0.636	1.594	2.998	1.703	0.861	0.494	0.379	0.307	0.598	0.514	0.582

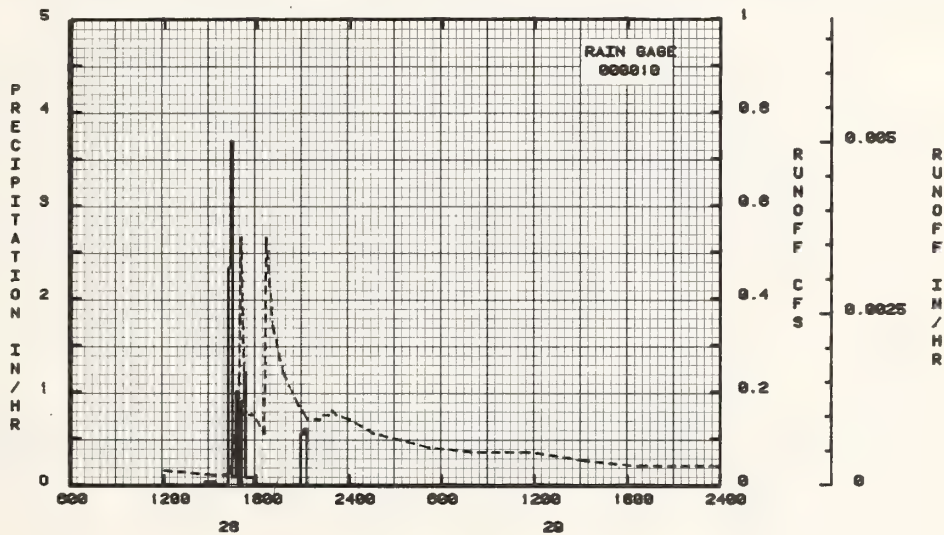
NOTES: To convert mean daily discharge in CPS to IN/DAY, multiply by 0.1630250. STA AV based on 12 yr (1959-1970) record period.

1970 SELECTED RUNOFF EVENT NORTH DANVILLE, VERMONT WATERSHED W-2												
ANTECEDENT CONDITIONS			RAINFALL				RUNOFF					
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.		
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)		
EVENT OF AUGUST 28 - 29, 1970												
8-28	RG 000010			PG 000010								
	0.0	0.002	8-28	1440	0.0	0.0	8-28	1200	0.026	0.0		
				1520	0.0300	0.02		1520	0.024	0.0006		
				1610	0.0	0.02		1610	0.024	0.0007		
				1619	2.3332	0.37		1616	0.028	0.0007		
				1626	3.6861	0.80		1621	0.034	0.0007		
WATERSHED CONDITIONS: 38% pastured land; 37% hay; and 25% forest.				1641	0.0800	0.82		1626	0.052	0.0007		
				1650	0.9999	0.97		1633	0.063	0.0007		
				1702	0.0	0.97		1640	0.109	0.0008		
				1712	0.9000	1.12		1649	0.168	0.0009		
				1717	1.2000	1.22		1652	0.237	0.0010		
				1749	0.0750	1.26		1655	0.352	0.0011		
				2052	0.0	1.26		1658	0.534	0.0013		
				2103	0.5455	1.36		1715	0.149	0.0020		
				2114	0.5999	1.47		1730	0.155	0.0023		
								1745	0.155	0.0026		
							1800	0.137	0.0028			
							1830	0.109	0.0032			
							1836	0.534	0.0034			
							1903	0.336	0.0047			
							1943	0.237	0.0060			
							2043	0.168	0.0074			
							2119	0.143	0.0080			
							2147	0.137	0.0084			
							2205	0.143	0.0087			
							2219	0.149	0.0089			
							2239	0.155	0.0092			
							2253	0.160	0.0095			
							2309	0.155	0.0098			
							2400	0.137	0.0106			
							8-29	134	0.109	0.0119		
								510	0.079	0.0142		
								754	0.071	0.0156		
								1139	0.066	0.0173		
								1530	0.052	0.0188		
								1850	0.044	0.0199		

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.006793. For 30-day antecedent rainfall and runoff, see tables of daily amounts.

1970		SELECTED RUNOFF EVENT				NORTH DANVILLE, VERMONT WATERSHED W-2				
ANTECEDENT CONDITIONS			RAINFALL				RUNOFF			
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)
EVENT OF AUGUST 28 - 29, 1970 (CONTINUED)										
								2400	0.044	0.0214

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.006793. For 30-day antecedent rainfall and runoff, see tables of daily amounts.



EVENT OF AUGUST 28 - 29, 1970

NORTH DANVILLE, VERMONT WATERSHED W-2

NORTH DANVILLE, VERMONT WATERSHED W-3

LOCATION: Caledonia County, Vermont; 7.5 mi. NW of St. Johnsbury; Pope Brook, Sleepers River, Connecticut River Basin.

AREA: 2067.00 acres 3.23 sq. miles

MONTHLY PRECIPITATION AND RUNOFF (inches)							NORTH DANVILLE, VERMONT WATERSHED W-3										
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual			
1970	P	1.49	4.09	3.32	4.36	4.23	4.46	1.74	5.49	3.97	2.69	3.15	5.85	44.84			
	Q	1.269	1.597	1.199	6.450	3.425	1.392	0.753	0.547	0.589	0.669	0.781	0.799	19.469			
STA AV	P	2.74	3.34	3.28	3.70	3.78	4.13	3.72	4.56	3.27	4.14	4.66	3.99	45.31			
	Q	1.031	0.931	1.542	6.720	3.789	1.540	0.922	0.805	0.697	1.167	1.516	1.344	22.004			
ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																	
		Maximum Discharge		1 Hour		2 Hours		Maximum Volume for Selected Time Interval									
		Date	Rate	Date	Vol.	Date	Vol.	6 Hours		12 Hours		1 Day		2 Days		8 Days	
								Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.
1970		4-24	0.042	4-24	0.041	4-24	0.081	4-24	0.224	4-24	0.387	4-24	0.614	4-24	0.991	4-21	3.007
MAXIMUMS FOR PERIOD OF RECORD																	
		5-20	0.076	4-21	0.070	4-21	0.130	4-14	0.320	4-14	0.590	4-15	1.080	4-16	1.860	4-20	4.440
		1969		1963		1963		1964		1964		1964		1964		1964	

NOTES: Watershed conditions: Forest, predominantly hardwoods, 67%; pasture of mostly bluegrass, 19%; cultivated land consisting of clover, orchard grass, and timothy hay with very small area in row crops, 11%; and idle land in tall grasses and woody plants, 3%. For map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1960-61, USDA Misc. Pub. 994, p. 67.3-5. Precipitation records began January 1, 1959. Runoff records began January 1, 1960. For long-time precipitation records, see National Weather Service records at St. Johnsbury, Vt.

1970 DAILY PRECIPITATION (inches)													
NORTH DANVILLE, VERMONT WATERSHED W-3													
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
1	0.0	0.0	0.0	0.0	0.0	0.13	0.0	1.44	0.12	0.02	0.0	0.0	0.0
2	0.0	0.77	0.08	1.59	0.09	0.0	0.15	0.21	0.0	0.0	0.0	0.0	0.08
3	0.0	0.70	0.0	0.56	0.37	0.09	0.0	0.26	0.42	0.43	0.0	0.0	0.0
4	0.0	0.29	0.11	0.0	0.0	0.0	0.47	0.0	0.53	0.05	0.0	1.24	
5	0.01	0.0	0.11	0.0	0.19	0.85	0.02	0.0	0.40	0.06	0.0	0.10	
6	0.03	0.0	0.0	0.0	0.22	0.18	0.02	0.0	0.34	0.0	0.14	0.39	
7	0.0	0.0	0.05	0.0	0.17	0.0	0.0	0.0	0.01	0.0	0.0	0.0	
8	0.02	0.0	0.25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.03	
9	0.12	0.0	0.02	0.0	0.12	0.0	0.0	0.0	0.0	0.0	0.0	0.85	
10	0.08	0.05	0.12	0.0	0.42	0.0	0.09	0.04	0.17	0.0	0.05	0.06	
11	0.04	0.71	0.10	0.0	0.45	0.25	0.06	0.01	0.0	0.11	0.36	0.0	
12	0.03	0.16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
13	0.12	0.02	0.35	0.0	0.0	0.0	0.0	0.0	0.0	0.11	0.0	0.31	
14	0.06	0.0	0.15	0.0	0.0	0.0	0.0	0.0	0.0	0.21	0.05	0.09	
15	0.0	0.45	0.09	0.0	0.0	0.0	0.0	0.0	0.30	0.63	0.64	0.03	
16	0.0	0.04	0.01	0.0	0.05	0.0	0.20	0.0	0.19	0.13	0.01	0.0	
17	0.05	0.0	0.0	0.36	1.17	0.0	0.02	0.0	0.05	0.05	0.02	0.73	
18	0.09	0.0	0.0	0.08	0.0	0.13	0.71	0.0	0.0	0.13	0.0	0.08	
19	0.0	0.14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.23	0.21	
20	0.0	0.0	0.30	0.22	0.0	0.0	0.0	0.54	0.0	0.0	0.22	0.09	
21	0.05	0.05	0.46	0.26	0.0	0.0	0.0	0.14	0.0	0.0	0.39	0.05	
22	0.01	0.11	0.08	0.0	0.51	0.09	0.0	0.0	0.30	0.19	0.04	0.51	
23	0.07	0.11	0.23	0.0	0.0	0.0	0.0	1.25	0.05	0.52	0.32	0.03	
24	0.0	0.09	0.21	1.29	0.0	0.0	0.0	0.01	0.0	0.05	0.02	0.73	
25	0.08	0.24	0.16	0.0	0.10	0.07	0.0	0.07	0.0	0.0	0.03	0.0	
26	0.21	0.0	0.09	0.0	0.37	0.20	0.0	0.14	0.0	0.0	0.01	0.09	
27	0.0	0.04	0.17	0.0	0.0	1.16	0.0	0.0	0.79	0.0	0.0	0.09	
28	0.19	0.12	0.18	0.0	0.0	0.0	0.0	1.21	0.08	0.0	0.45	0.03	
29	0.23	0.0	0.0	0.0	0.0	0.33	0.0	0.0	0.20	0.0	0.05	0.03	
30	0.0	0.0	0.0	0.0	0.0	0.98	0.0	0.05	0.02	0.0	0.12	0.0	
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.12	0.0	0.0	0.0	0.0	
TOTAL	1.49	4.09	3.32	4.36	4.23	4.46	1.74	5.49	3.97	2.69	3.15	5.85	
STA AV	2.74	3.34	3.28	3.70	3.78	4.13	3.72	4.56	3.27	4.14	4.66	3.99	

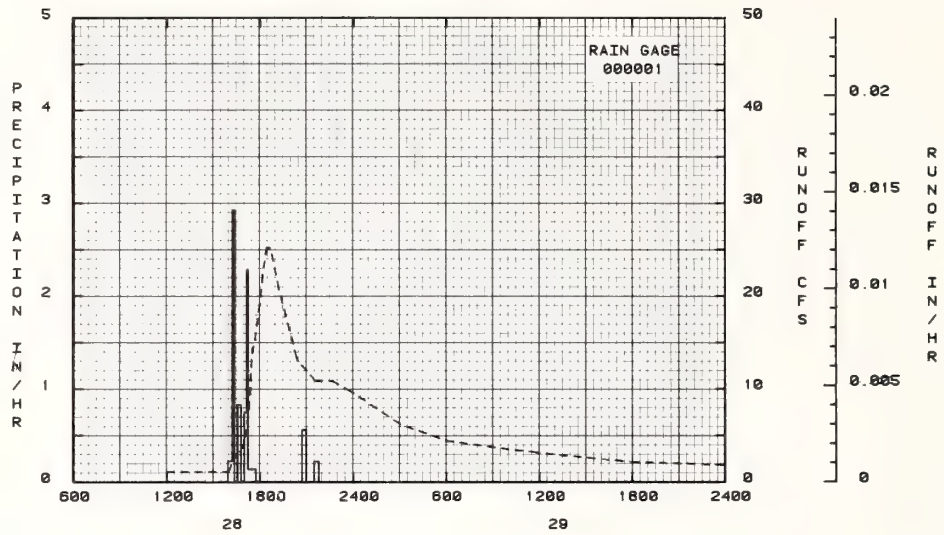
NOTES: For temperature data see table of daily maximum and minimum values included with information for Watershed 67.001. Daily precipitation values from rain gage K-01. All precipitation is rain except for the months of December, January, and February, during which all precipitation is snow or rain on snow. STA AV based on 12 yr (1959-70) record period.

1970 MEAN DAILY DISCHARGE (cfs) NORTH DANVILLE, VERMONT WATERSHED W-3												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	4.709	3.396	3.361	3.310	18.402	4.683	5.503	1.734	1.348	1.591	1.434	2.957
2	4.583	5.184	3.361	5.160	15.916	4.425	3.526	2.576	1.169	1.467	1.445	3.276
3	4.420	16.802	3.361	5.580	18.952	4.119	3.640	1.443	1.228	2.295	1.445	3.060
4	4.139	9.445	3.361	4.757	13.297	3.649	3.586	1.503	3.495	2.173	1.445	2.775
5	4.100	6.230	3.361	4.159	12.455	6.006	4.412	1.335	4.262	1.708	1.467	2.984
6	4.100	5.223	3.292	4.184	3.706	12.829	2.898	1.270	2.396	1.557	1.534	2.620
7	3.984	4.462	3.224	4.334	10.000	5.635	2.317	1.193	1.876	1.512	1.534	2.286
8	3.833	4.258	3.224	5.448	10.373	4.592	2.056	1.141	1.591	1.445	1.467	2.126
9	3.576	4.139	3.224	9.131	9.625	4.040	1.999	1.092	1.534	1.381	1.392	2.167
10	3.503	4.100	3.224	9.396	11.204	3.632	1.804	1.040	1.533	1.329	1.516	2.235
11	3.467	7.199	3.156	7.148	12.695	3.483	2.112	1.121	1.753	1.415	2.441	2.235
12	3.361	6.386	3.089	7.599	10.774	3.498	1.789	1.121	1.299	1.478	1.947	2.194
13	3.361	4.908	3.089	10.589	8.899	2.945	1.611	1.102	1.222	1.557	1.608	2.126
14	3.361	4.539	3.089	15.366	8.176	2.632	1.591	1.047	1.183	2.066	1.568	2.126
15	3.361	4.419	3.089	15.139	7.428	2.567	1.640	0.994	1.240	2.994	2.416	2.128
16	3.361	4.259	2.894	22.007	7.077	2.539	1.932	0.976	2.069	2.921	2.849	2.126
17	3.241	3.984	2.829	32.096	18.758	2.590	1.765	0.909	1.527	2.073	2.087	2.126
18	3.224	3.946	2.829	35.905	11.319	2.763	2.687	0.835	1.413	1.879	1.879	2.126
19	3.224	3.946	3.062	24.662	8.689	2.488	2.288	0.780	1.372	1.788	2.392	2.126
20	3.224	3.833	3.650	20.480	7.761	2.273	1.769	0.878	1.198	1.625	3.173	2.153
21	3.024	3.684	3.687	20.552	6.804	2.299	1.625	1.563	1.198	1.625	5.747	2.235
22	2.957	3.647	3.908	23.781	8.533	2.359	1.456	1.041	1.770	1.661	3.244	2.235
23	2.957	3.539	3.871	21.945	7.968	2.114	1.331	3.170	1.409	4.402	3.139	2.153
24	2.957	3.503	3.657	44.182	6.267	1.967	1.291	2.028	1.242	2.732	2.401	2.126
25	2.957	3.503	3.487	39.830	6.343	2.005	1.311	1.330	1.198	2.083	1.961	2.126
26	2.957	3.396	3.258	34.120	9.013	1.997	1.302	1.138	1.179	1.802	2.008	2.126
27	2.957	3.361	4.372	38.917	7.754	8.701	1.191	1.269	2.383	1.690	1.955	2.126
28	2.957	3.361	3.911	33.601	5.908	3.614	1.215	5.031	2.063	1.625	3.479	2.126
29	3.290		3.465	26.903	5.119	2.606	1.264	3.736	2.137	1.534	3.629	2.126
30	5.171		3.421	21.870	4.722	11.605	1.270	1.574	1.842	1.371	3.230	2.046
31	3.911		3.291		4.444		1.204	1.499		1.360		0.0
MEAN	3.556	4.952	3.358	18.672	9.596	4.028	2.109	1.531	1.704	1.875	2.261	2.238
INCHES	1.269	1.597	1.199	6.450	3.425	1.392	0.753	0.547	0.589	0.669	0.781	0.799
STA AV	1.031	0.931	1.542	6.720	3.789	1.540	0.922	0.805	0.697	1.167	1.516	1.344

NOTES: To convert mean daily discharge in CFS to IN/DAY, multiply by 0.011515. STA AV based on 11 yr (1960-70) record period.

1970 SELECTED RUNOFF EVENT NORTH DANVILLE, VERMONT WATERSHED W-3												
ANTECEDENT CONDITIONS			EVENT OF AUGUST 28 - 29, 1970									
Date	Rainfall	Runoff	Date	Time	RAINFALL	Acc.	Date	Time	Runoff	Rate	Acc.	
Mo-Day	(inches)	(inches)	Mo-Day	of Day	Intensity (in/hr)	(inches)	Mo-Day	of Day	(cfs)		(inches)	
8-28	RG 000001 0.0	0.006	8-28	1557	0.0	0.0	8-28	1200	1.121		0.0	
				1613	0.2250	0.06		1559	1.121		0.0021	
				1621	2.9250	0.45		1621	2.829		0.0024	
				1634	0.0	0.45		1632	2.582		0.0026	
				1647	3.8308	0.63		1659	4.100		0.0033	
WATERSHED CONDITIONS: 67% forest land; 19% pastured land; 11% hay and 3% idle land with dense grass and brush growth.				1700	0.0	0.63		1717	7.906		0.0042	
				1708	0.7501	0.73		1728	13.158		0.0051	
				1713	2.2802	0.92		1800	19.199		0.0093	
				1744	0.1355	0.99		1810	22.300		0.0109	
				2042	0.0	0.99		1825	25.230		0.0138	
				2058	0.5625	1.14		1839	25.230		0.0166	
				2129	0.0	1.14		1513	20.717		0.0228	
				2148	0.2210	1.21		2024	13.158		0.0324	
								2133	10.878		0.0390	
								2240	10.878		0.0448	
								2400	9.575		0.0514	
								301	6.216		0.0628	
								600	4.415		0.0704	
								1200	3.089		0.0812	
								1800	2.126		0.0887	
								2400	1.816		0.0944	

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.0004798. For 30-day antecedent rainfall and runoff, see tables of daily amounts.



NORTH DANVILLE, VERMONT WATERSHED W-4

LOCATION: Caledonia County, Vermont; 4.7 mi. NW of St. Johnsbury; Morrill Brook, Sleepers River, Connecticut River Basin.

AREA: 10752.00 acres 16.80 sq. miles

MONTHLY PRECIPITATION AND RUNOFF (inches)														NORTH DANVILLE, VERMONT WATERSHED W-4													
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual													
1970	P	0.92	2.64	1.93	3.77	3.05	3.87	1.54	4.84	2.36	1.71	2.44	4.15	33.22													
	Q	1.027	1.444	1.109	6.285	3.247	1.084	0.486	0.368	0.382	0.529	0.658	0.643	17.261													
STA AV	P	1.88	2.20	2.26	2.98	3.12	3.39	3.17	3.91	2.57	3.37	3.60	3.10	35.55													
	Q	0.874	0.798	1.629	5.841	3.559	1.389	0.723	0.589	0.507	0.995	1.413	1.195	19.512													
ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																											
		Maximum Discharge		1 Hour		2 Hours		Maximum Volume for Selected Time Interval		1 Day		2 Days		8 Days													
		Date	Rate	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.												
1970		4-24	0.041	4-24	0.040	4-24	0.079	4-24	0.227	4-24	0.401	4-24	0.616	4-24	0.943	4-21	2.656										
MAXIMUMS FOR PERIOD OF RECORD																											
		5-20	0.061	5-20	0.061	5-20	0.118	5-20	0.310	4-19	0.522	4-18	0.900	4-17	1.485	4-14	4.323										
		1969		1969		1969		1969		1969		1969		1969		1969											

NOTES: Forest, 74%; cultivated, 12%; pasture, 12%; and idle, 2%. For map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1967, USDA Misc. Pub. 1262, p. 67.4-19. Precipitation records began 1959. Runoff records began January 1, 1960. For long-time precipitation records, see National Weather Service records at St. Johnsbury, Vt.

1970 DAILY PRECIPITATION (inches)													NORTH DANVILLE, VERMONT WATERSHED W-4												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec													
1	0.0	0.0	0.0	0.0	0.0	0.06	0.0	0.69	0.09	0.0	0.0	0.03													
2	0.0	0.70	0.04	1.50	0.10	0.0	0.10	0.26	0.0	0.0	0.0	0.09													
3	0.0	0.64	0.0	0.08	0.26	0.0	0.0	0.25	0.38	0.33	0.0	0.0													
4	0.0	0.21	0.16	0.0	0.0	0.0	0.48	0.01	0.47	0.02	0.0	0.0													
5	0.0	0.0	0.15	0.0	0.10	1.13	0.0	0.0	0.09	0.0	0.0	0.07													
6	0.02	0.0	0.0	0.0	0.0	0.10	0.18	0.0	0.0	0.08	0.0	0.0	0.29												
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0												
8	0.0	0.0	0.05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.01												
9	0.0	0.0	0.02	0.0	0.05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.69												
10	0.07	0.04	0.03	0.0	0.28	0.0	0.04	0.15	0.15	0.0	0.05	0.05	0.05												
11	0.01	0.20	0.01	0.0	0.24	0.12	0.30	0.01	0.01	0.10	0.29	0.0	0.0												
12	0.02	0.06	0.0	0.0	0.01	0.0	0.0	0.03	0.0	0.0	0.0	0.0	0.0												
13	0.06	0.0	0.36	0.0	0.0	0.0	0.0	0.0	0.0	0.05	0.0	0.26	0.0												
14	0.0	0.0	0.05	0.0	0.0	0.0	0.0	0.0	0.0	0.18	0.01	0.05	0.0												
15	0.0	0.35	0.01	0.0	0.0	0.0	0.0	0.0	0.20	0.38	0.56	0.02	0.0												
16	0.0	0.0	0.0	0.0	0.02	0.0	0.19	0.0	0.16	0.04	0.04	0.02	0.0												
17	0.01	0.93	0.0	0.35	1.14	0.0	0.01	0.0	0.0	0.08	0.0	0.43	0.0												
18	0.06	0.0	0.0	0.01	0.0	0.10	0.37	0.0	0.05	0.0	0.0	0.16	0.0												
19	0.0	0.07	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.18	0.04	0.0												
20	0.02	0.0	0.17	0.27	0.0	0.0	0.0	0.36	0.0	0.0	0.20	0.02	0.0												
21	0.03	0.02	0.35	0.27	0.0	0.0	0.0	0.26	0.0	0.0	0.29	0.0	0.0												
22	0.0	0.04	0.01	0.0	0.29	0.10	0.0	0.0	0.11	0.17	0.08	0.43	0.0												
23	0.03	0.03	0.08	0.0	0.0	0.0	0.0	1.05	0.0	0.33	0.19	0.06	0.0												
24	0.0	0.04	0.07	1.29	0.0	0.04	0.0	0.0	0.0	0.03	0.0	0.45	0.0												
25	0.06	0.13	0.06	0.0	0.05	0.03	0.0	0.0	0.04	0.0	0.0	0.0	0.0												
26	0.21	0.0	0.08	0.0	0.41	0.19	0.0	0.17	0.01	0.0	0.0	0.0	0.0												
27	0.93	0.04	0.08	0.0	0.0	1.33	0.0	0.0	0.32	0.0	0.0	0.0	0.0												
28	0.15	0.04	0.11	0.0	0.0	0.0	0.0	1.47	0.04	0.0	0.42	0.0	0.0												
29	0.14	0.0	0.0	0.0	0.0	0.22	0.05	0.0	0.16	0.0	0.03	0.0	0.0												
30	0.0	0.0	0.0	0.0	0.0	0.67	0.0	0.05	0.0	0.0	0.10	0.0	0.0												
31	0.0	0.0	0.04	0.0	0.0	0.0	0.0	0.08	0.0	0.0	0.0	0.0	0.0												
TOTAL	0.92	2.64	1.93	3.77	3.05	3.87	1.54	4.84	2.36	1.71	2.44	4.15													
STA AV	1.88	2.20	2.26	2.98	3.12	3.39	3.17	3.91	2.57	3.37	3.60	3.10													

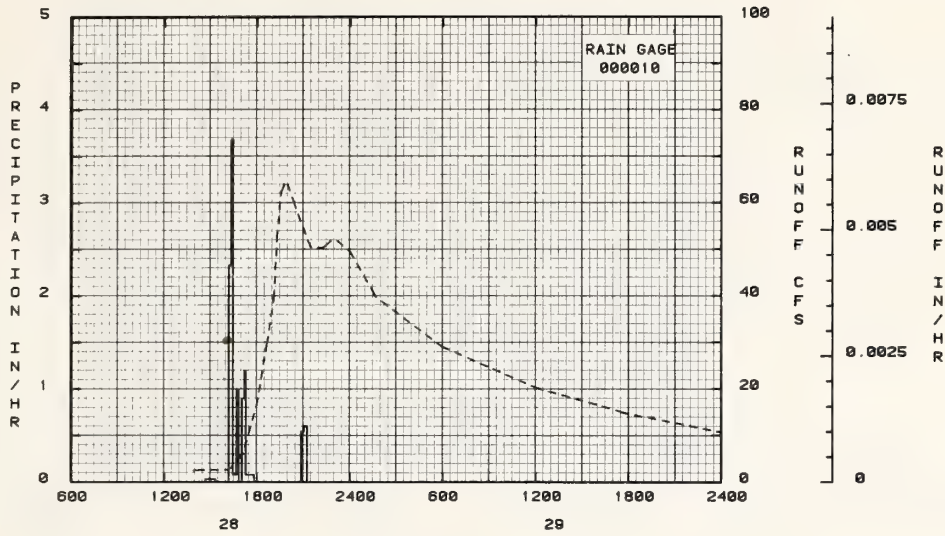
NOTES: For temperature data see table of daily maximum and minimum values included with information for Watershed 67.001. Daily precipitation values from rain gage R-10. All precipitation is rain except for the months of December, January, and February, during which all precipitation is snow or rain on snow. STA AV based on 12 yr (1959-1970) record period.

1970 MEAN DAILY DISCHARGE (cfs) NORTH DANVILLE, VERMONT WATERSHED W-4												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	22.01	13.54	14.28	18.05	91.62	19.24	26.94	3.82	4.85	6.30	5.45	14.32
2	21.22	14.30	14.28	22.13	78.79	19.37	14.31	21.71	3.85	5.23	5.30	14.24
3	20.33	66.12	14.28	51.35	88.23	17.78	14.29	7.94	3.31	8.21	5.08	13.77
4	19.36	57.35	14.28	43.33	67.02	17.20	16.31	8.19	13.19	9.62	5.06	12.05
5	17.90	34.14	14.28	26.86	58.59	19.82	22.16	4.94	14.07	7.19	5.06	10.41
6	17.59	30.34	14.28	24.71	63.49	70.81	12.62	3.70	9.92	5.87	5.39	10.67
7	16.99	25.76	14.28	26.80	56.37	29.31	9.11	3.01	8.01	5.25	5.78	9.60
8	16.60	22.69	14.19	31.77	49.45	21.56	7.38	2.51	6.03	4.88	4.92	8.21
9	16.22	20.99	13.64	55.99	45.26	17.76	6.35	2.03	4.95	4.75	4.62	8.45
10	16.12	20.33	13.32	72.91	49.33	14.92	5.68	1.78	4.74	4.26	4.86	9.60
11	15.84	23.53	12.98	46.60	55.04	13.32	6.87	2.14	5.92	4.37	8.59	9.52
12	14.91	31.89	12.98	54.66	52.04	12.87	6.43	2.02	5.07	4.87	9.40	8.84
13	14.64	27.94	13.32	70.19	41.51	10.86	4.97	1.60	3.77	5.10	7.34	8.54
14	14.37	21.51	13.58	94.13	37.59	10.14	4.21	1.38	3.31	8.36	6.69	8.71
15	14.01	20.11	13.32	113.16	33.04	9.39	4.15	1.22	3.23	14.15	10.20	8.44
16	13.66	19.78	12.94	119.15	31.32	8.71	5.33	1.16	6.93	16.33	13.74	8.06
17	13.84	19.14	12.90	152.00	96.98	8.45	6.39	0.82	5.93	10.40	10.54	7.93
18	13.66	18.62	12.90	178.34	65.87	9.16	5.53	0.70	4.82	8.76	8.59	8.64
19	13.07	18.51	13.23	115.35	43.83	9.27	8.87	0.63	4.68	7.41	8.84	8.77
20	12.65	17.90	15.26	103.37	36.51	7.53	5.22	0.64	3.91	6.55	12.79	8.81
21	12.56	17.29	18.77	102.43	32.05	7.19	4.13	4.07	3.31	6.16	28.26	8.62
22	12.00	16.90	19.18	113.56	33.26	7.38	3.51	2.65	4.50	6.16	18.51	8.19
23	11.36	16.60	22.51	102.84	36.07	7.04	3.04	11.14	4.65	16.90	16.76	8.15
24	11.06	16.22	20.26	213.80	27.68	5.80	2.60	12.77	3.95	14.19	11.58	8.15
25	11.06	16.03	21.12	199.87	26.31	5.25	2.27	5.19	3.55	9.72	8.48	8.57
26	11.44	15.46	16.89	146.92	39.39	5.16	2.10	3.57	3.22	7.77	7.31	8.70
27	11.29	14.82	14.37	157.97	39.18	39.45	1.82	3.25	5.02	6.97	8.97	8.97
28	11.29	14.55	24.29	150.95	26.97	20.23	1.69	14.72	8.19	6.24	13.37	8.69
29	12.51		21.09	125.47	23.24	11.13	1.66	22.99	7.58	5.94	19.78	8.44
30	17.10		18.24	104.69	21.22	33.45	1.96	7.68	7.94	5.56	15.80	8.25
31	17.25		17.86		15.65		1.67	6.20		5.45		7.93
MEAN	14.964	23.298	16.164	94.643	47.318	16.320	7.083	5.360	5.747	7.708	9.903	9.364
INCHES	1.027	1.444	1.109	6.285	3.247	1.084	0.486	0.368	0.382	0.529	0.658	0.643
STA AV	0.874	0.798	1.629	5.841	3.559	1.389	0.723	0.589	0.507	0.995	1.413	1.195

NOTES: To convert mean daily discharge in CFS to IN/DAY, multiply by 0.002213695. STA AV based on 11 yr (1960-1970) record period.

1970			SELECTED RUNOFF EVENT										NORTH DANVILLE, VERMONT WATERSHED W-4									
ANTECEDENT CONDITIONS			RAINFALL						RUNOFF													
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.												
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)												
EVENT OF AUGUST 28 - 29, 1970																						
BG 000010			PG 000010																			
8-28	0.0	0.004	8-28	1440	0.0	0.0	8-28	1354	2.521	0.0												
				1520	0.0300	0.02		1435	2.650	0.0002												
				1610	0.0	0.02		1609	2.650	0.0006												
				1619	2.3332	0.37		1627	3.504	0.0007												
				1626	3.6861	0.80		1706	6.074	0.0010												
WATERSHED CONDITIONS:				1641	0.0800	0.82		1759	16.506	0.0019												
74% forest land; 12% pastured				1650	0.9999	0.97		1843	31.234	0.0035												
land; 12% cultivated; 2% idle				1702	0.0	0.97		1906	39.768	0.0048												
land with dense grass and				1712	0.9000	1.12		1919	54.143	0.0057												
brush growth.				1717	1.2000	1.22		1933	62.337	0.0069												
				1749	0.0750	1.26		1945	64.058	0.0081												
				2052	J.0	1.26		1957	64.058	0.0093												
				2103	0.5455	1.36		2029	58.977	0.0123												
				2114	0.5959	1.47		2129	50.301	0.0173												
								2215	50.301	0.0209												
								2245	51.818	0.0233												
								2312	51.818	0.0254												
								2400	49.553	0.0291												
							8-29	142	39.766	0.0361												
								559	29.017	0.0497												
								1200	20.216	0.0634												
								1759	14.635	0.0730												
								2400	10.679	0.0800												

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.000092. For 30-day antecedent rainfall and runoff see tables of daily amounts.



EVENT OF AUGUST 28 - 29, 1970
NORTH DANVILLE, VERMONT WATERSHED W-4

NORTH DANVILLE, VERMONT WATERSHED W-5

LOCATION: Caledonia County, Vermont; 2 mi. NW of St. Johnsbury; Sleepers River, Connecticut River Basin.

AREA: 27469.00 acres 42.92 sq. miles

MONTHLY PRECIPITATION AND RUNOFF (inches)							NORTH DANVILLE, VERMONT WATERSHED W-5										
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual			
1970	P	0.92	2.64	1.93	3.77	3.05	3.87	1.54	4.84	2.36	1.71	2.44	4.15	33.22			
	Q	0.952	1.692	1.064	6.878	2.890	0.963	0.444	0.245	0.274	0.400	0.633	0.901	17.335			
STA AV	P	1.88	2.20	2.26	2.98	3.12	3.39	3.17	3.91	2.57	3.37	3.60	3.10	35.55			
	Q	1.327	1.191	2.341	6.048	2.943	1.395	0.595	0.486	0.431	0.938	1.421	1.347	20.163			
ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																	
		Maximum Discharge		1 Hour		2 Hours		Maximum Volume for Selected Time Interval									
		Date	Rate	Date	Vol.	Date	Vol.	6 Hours	12 Hours	1 Day	2 Days	8 Days					
		Date	Rate	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Date	Vol.			
1970		4-24	0.062	4-24	0.061	4-24	0.121	4-24	0.335	4-24	0.555	4-24	0.807	4-24	1.155	4-21	2.924
MAXIMUMS FOR PERIOD OF RECORD																	
		5-20	0.080	5-20	0.077	5-20	0.146	5-20	0.351	5-20	0.574	4-18	0.861	4-17	1.368	4-13	3.928
		1969		1969		1969		1969		1969		1969		1969		1969	

NOTES: Watershed conditions: Forest predominantly hardwoods, 67%; cultivated land consisting of mostly clover, orchard grass, and timothy hay with very little in row crops, 17%; pasture of mostly bluegrass, 13%; idle land in tall grasses and woody plants, 2%; and homesites and roads, 1%. For map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1960-61, USDA Misc. Pub. 994, p. 67.5-5. Precipitation records began January 1, 1959. Runoff records began January 1, 1960. For long-time precipitation records, see National Weather Service records at St. Johnsbury, Vt.

1970		DAILY PRECIPITATION (inches)							NORTH DANVILLE, VERMONT WATERSHED W-5						
	Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
	1	0.0	0.0	0.0	0.0	0.0	0.06	0.0	0.69	0.09	0.0	0.0	0.03		
	2	0.0	0.70	0.04	1.50	0.10	0.0	0.10	0.26	0.0	0.0	0.0	0.09		
	3	0.0	0.64	0.0	0.08	0.26	0.0	0.0	0.25	0.38	0.33	0.0	0.0		
	4	0.0	0.21	0.16	0.0	0.0	0.0	0.48	0.01	0.47	0.02	0.0	0.94		
	5	0.0	0.0	0.15	0.0	0.10	1.13	0.0	0.0	0.09	0.0	0.0	0.07		
	6	0.02	0.0	0.0	0.0	0.10	0.18	0.0	0.0	0.08	0.0	0.0	0.29		
	7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
	8	0.0	0.0	0.05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.01		
	9	0.0	0.0	0.02	0.0	0.05	0.0	0.0	0.0	0.0	0.0	0.0	0.69		
	10	0.07	0.04	0.03	0.0	0.28	0.0	0.04	0.15	0.15	0.0	0.05	0.05		
	11	0.01	0.20	0.01	0.0	0.24	0.12	0.30	0.01	0.01	0.10	0.29	0.0		
	12	0.02	0.06	0.0	0.0	0.01	0.0	0.0	0.03	0.0	0.0	0.0	0.0		
	13	0.06	0.0	0.36	0.0	0.0	0.0	0.0	0.0	0.0	0.05	0.0	0.26		
	14	0.0	0.0	0.05	0.0	0.0	0.0	0.0	0.0	0.0	0.18	0.01	0.09		
	15	0.0	0.35	0.01	0.0	0.0	0.0	0.0	0.0	0.20	0.38	0.56	0.02		
	16	0.0	0.0	0.0	0.0	0.02	0.0	0.19	0.0	0.16	0.04	0.04	0.02		
	17	0.01	0.03	0.0	0.35	1.14	0.0	0.01	0.0	0.0	0.08	0.0	0.43		
	18	0.06	0.0	0.0	0.01	0.0	0.10	0.37	0.0	0.05	0.0	0.0	0.16		
	19	0.0	0.07	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.18	0.04		
	20	0.02	0.0	0.17	0.27	0.0	0.0	0.0	0.36	0.0	0.0	0.20	0.02		
	21	0.03	0.02	0.35	0.27	0.0	0.0	0.0	0.26	0.0	0.0	0.29	0.0		
	22	0.0	0.04	0.11	0.0	0.29	0.10	0.0	0.0	0.11	0.17	0.08	0.43		
	23	0.03	0.03	0.08	0.0	0.0	0.0	0.0	1.05	0.0	0.33	0.19	0.06		
	24	0.0	0.04	0.07	1.29	0.0	0.04	0.0	0.0	0.0	0.03	0.0	0.45		
	25	0.06	0.13	0.06	0.0	0.05	0.03	0.0	0.0	0.04	0.0	0.0	0.0		
	26	0.21	0.0	0.08	0.0	0.41	0.19	0.0	0.17	0.01	0.0	0.0	0.0		
	27	0.03	0.04	0.06	0.0	0.0	1.03	0.0	0.0	0.32	0.0	0.0	0.0		
	28	0.15	0.04	0.11	0.0	0.0	0.0	0.0	1.47	0.04	0.0	0.42	0.0		
	29	0.14	0.0	0.0	0.0	0.0	0.22	0.05	0.0	0.16	0.0	0.03	0.0		
	30	0.0	0.0	0.0	0.0	0.0	0.67	0.0	0.05	0.0	0.0	0.10	0.0		
	31	0.0	0.0	0.04	0.0	0.0	0.0	0.0	0.08	0.0	0.0	0.0	0.0		
TOTAL		0.92	2.64	1.93	3.77	3.05	3.87	1.54	4.84	2.36	1.71	2.44	4.15		
STA AV		1.88	2.20	2.26	2.98	3.12	3.39	3.17	3.91	2.57	3.37	3.60	3.10		

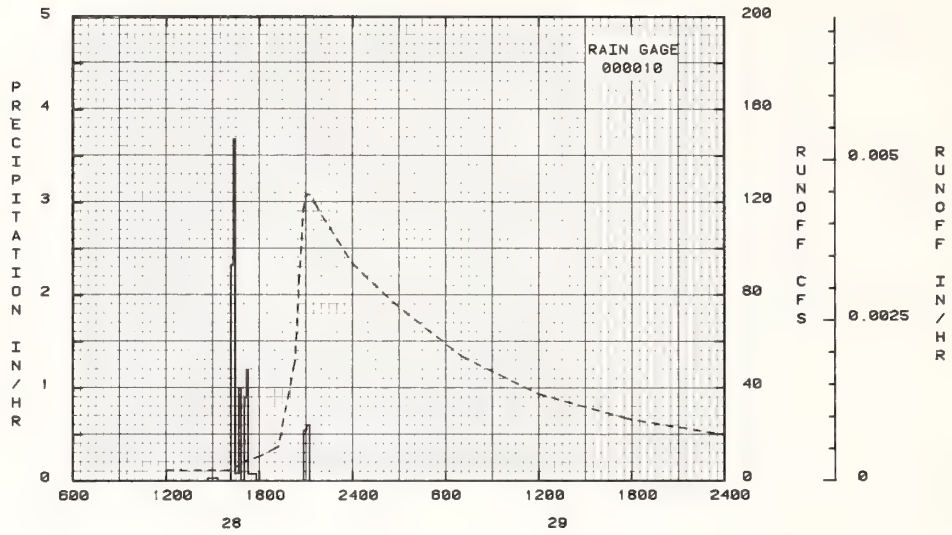
NOTES: For temperature data see table of maximum and minimum values included with information for Watershed 67.001. Daily precipitation values from rain gage B-10. All precipitation is rain except for the months of December, January, and February, during which all precipitation is snow or rain on snow. STA AV based on 12 yr (1959-1970) record period.

1970 MEAN DAILY DISCHARGE (cfs) NORTH DANVILLE, VERMONT WATERSHED W-5												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	55.63	36.46	32.48	46.63	202.83	38.30	78.07	5.44	8.43	11.23	10.30	51.34
2	52.82	39.00	33.79	57.52	171.97	39.39	35.38	31.82	6.65	9.35	10.30	49.41
3	48.47	400.61	33.51	158.05	210.30	34.91	35.20	13.32	5.34	16.56	9.99	50.72
4	45.57	239.41	34.03	125.33	151.02	34.91	42.02	12.21	28.20	20.45	9.45	42.58
5	41.61	95.41	34.03	68.78	127.08	36.80	65.56	8.18	33.86	14.13	9.32	36.26
6	40.71	90.52	33.38	63.03	140.68	194.91	31.29	6.19	16.02	11.41	9.36	38.20
7	39.83	68.10	32.14	70.66	124.17	71.76	20.49	4.57	14.47	12.85	9.68	34.39
8	38.68	56.68	32.35	88.07	106.62	48.12	16.77	3.51	11.21	8.96	8.88	28.55
9	37.56	50.26	30.48	170.93	94.15	38.10	13.54	2.92	9.15	8.23	8.97	29.02
10	36.45	48.16	29.62	217.12	115.79	31.98	11.42	2.90	9.01	7.15	9.15	31.99
11	37.84	65.90	28.78	132.24	122.27	28.86	13.45	3.34	9.85	7.22	15.80	32.41
12	36.46	100.72	28.43	152.82	124.19	27.47	12.63	3.52	8.20	8.71	18.46	30.47
13	35.09	75.44	29.02	195.82	92.05	21.84	9.69	2.73	6.56	9.22	14.83	29.98
14	34.29	53.37	29.02	267.59	81.25	20.15	8.85	2.35	5.92	13.85	12.89	30.72
15	32.99	47.49	28.78	319.90	70.30	17.95	8.85	2.09	5.46	25.73	20.44	30.35
16	30.48	46.65	30.72	339.08	65.55	17.02	10.53	1.83	11.88	32.69	31.74	29.26
17	30.72	43.71	30.96	447.58	257.90	16.32	12.46	1.65	11.00	19.65	23.23	29.08
18	31.97	42.34	31.19	551.18	168.70	17.66	13.14	1.35	8.55	16.06	17.92	30.72
19	31.48	41.37	32.19	302.54	101.76	17.60	15.80	1.21	8.58	13.72	17.78	31.09
20	29.26	39.98	28.67	263.65	80.75	14.25	9.47	1.22	7.14	11.82	27.57	32.22
21	28.78	36.87	48.42	263.86	67.28	14.06	8.11	7.39	5.78	11.34	60.46	32.29
22	27.15	36.17	47.88	302.62	70.63	14.40	6.85	5.17	7.28	11.39	43.52	30.23
23	25.58	34.57	60.88	267.01	85.80	14.06	5.83	20.10	7.95	35.85	53.03	29.98
24	25.36	33.77	54.82	709.49	59.51	11.51	4.94	24.67	6.71	30.46	36.84	29.98
25	25.36	34.03	58.11	590.04	55.05	9.81	4.04	9.09	6.40	20.17	27.38	30.72
26	26.02	33.25	46.36	398.78	94.01	9.43	3.95	6.15	6.06	16.07	21.89	31.72
27	26.24	31.47	65.72	438.65	99.41	85.59	3.67	5.78	7.77	14.96	28.32	32.73
28	26.24	30.96	62.24	388.18	60.30	43.87	3.32	22.58	14.71	12.22	41.69	31.97
29	29.20		53.96	302.36	50.23	22.63	3.16	44.37	13.62	11.40	67.03	30.96
30	44.26		52.40	238.82	44.58	117.59	3.74	14.89	14.86	10.88	54.37	30.23
31	46.02		45.97		39.63		3.24	9.70		10.38		29.98
MEAN	35.42	69.73	39.61	264.61	107.60	37.04	16.53	9.10	10.55	14.88	24.35	33.53
INCHES	0.952	1.692	1.064	6.878	2.890	0.963	0.444	0.245	0.274	0.400	0.633	0.901
STA AV	1.327	1.191	2.341	6.048	2.943	1.095	0.595	0.486	0.431	0.938	1.421	1.347

NOTES: To convert mean daily discharge in CFS to IN/DAY, multiply by 0.0008665. STA AV based on 11 yr (1960-1970) record period.

1970			SELECTED RUNOFF EVENT										NORTH DANVILLE, VERMONT WATERSHED W-5									
ANTECEDENT CONDITIONS			RAINFALL				RUNOFF															
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.												
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)												
EVENT OF													AUGUST				28 - 29, 1970					
RG 000010			RG 000010																			
8-28	0.0	0.002	8-28	1440	0.0	0.0	8-28	1200	4.644	0.0												
				1520	0.0300	0.02		1605	4.644	0.0007												
				1610	0.0	0.02		1714	8.851	0.0010												
				1619	2.3332	0.37		1815	11.336	0.0014												
				1626	3.6861	0.80		1914	14.831	0.0019												
WATERSHED CONDITIONS:				1641	0.0800	0.82		2019	52.130	0.0032												
67% forest; 17% hay; 13%				1650	0.9999	0.97		2034	85.894	0.0038												
pastured land; 2% idle land				1702	0.0	0.97		2050	116.612	0.0048												
with dense brush and grass				1712	0.9000	1.12		2101	123.458	0.0056												
growth; 1% homesites and				1717	1.2000	1.22		2115	123.458	0.0066												
roads.				1749	0.0750	1.26		2149	116.612	0.0091												
				2052	0.0	1.26		2400	93.525	0.0174												
				2103	0.5455	1.36	8-29	237	76.910	0.0254												
				2114	0.5999	1.47		703	53.508	0.0358												
								1200	37.276	0.0439												
								1800	26.244	0.0508												
								2400	19.663	0.0558												

NOTES: To convert CFS to IN/HR, multiply by 0.000036104. For 30-day antecedent rainfall and runoff, see tables of daily amounts.



EVENT OF AUGUST 28 - 29, 1970
NORTH DANVILLE, VERMONT WATERSHED W-5

REYNOLDS, IDAHO WATERSHED W-1 (036068)

LOCATION: Owyhee County, Idaho; 34 miles south of Nampa; north flowing tributary to the Snake River.

AREA: 57700.00 acres 90.20 sq. miles

MONTHLY PRECIPITATION AND RUNOFF (inches)														REYNOLDS, IDAHO WATERSHED W-1 (036068)															
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual															
1970	P	5.75	0.79	2.10	2.13	1.36	1.60	0.46	0.20	0.87	1.72	3.87	2.12	22.97															
	Q	0.620	0.260	0.308	0.271	0.832	0.245	0.054	0.023	0.017	0.016	0.094	0.213	2.952															
STA AV	P	4.24	1.32	1.13	1.39	1.00	1.65	0.26	1.33	0.49	1.39	2.24	2.14	18.58															
	Q	0.468	0.277	0.241	0.491	0.546	0.290	0.035	0.024	0.013	0.017	0.041	0.235	2.676															
ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																													
		Maximum Discharge		1 Hour		2 Hours		Maximum Volume for Selected Time Interval		6 Hours		12 Hours		1 Day		2 Days		8 Days											
		Date	Rate	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.										
1970		1-27	0.012	1-27	0.012	1-27	0.023	1-27	0.061	1-27	0.098	1-26	0.136	1-26	0.177	1-20	0.463												
MAXIMUMS FOR PERIOD OF RECORD																													
		12-23	0.065	12-23	0.064	12-23	0.125	12-23	0.270	12-23	0.327	12-23	0.453	12-23	0.721	12-28	1.313												
		1964		1964		1964		1964		1964		1964		1964		1965													

NOTES: Watershed conditions: Predominately sagebrush rangeland, 95%; small stands of forest, 2%; permanent fields of flood irrigated alfalfa, 3%. For revised map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1968, USDA Misc. Pub. 1330, p. 68.1-6. Records began 1963. Precipitation data are Thiessen weighted average 'computed Actual' amounts from 45 rain gages. Station average precipitation amounts are based on 1968-70 data. Station average runoff amounts are based on the 1963-70 record period. For long-time precipitation records, see National Weather Service records at Boise, Idaho; 50 miles N.E. of watershed.

1970 DAILY AIR TEMPERATURE (degrees F)														REYNOLDS, IDAHO WATERSHED W-1 (036068)													
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
	max	min	max	min	max	min	max	min	max	min	max	min	max	max	min	max	min	max	min	max	min	max	min	max	min	max	
1	31	12	39	30	56	25	54	25	63	32	81	39	84	46	93	52	81	53	75	46	58	30	35	28			
2	35	19	42	29	39	24	45	29	72	33	86	45	86	53	81	53	80	50	77	40	48	19	40	28			
3	35	14	50	29	40	31	52	20	76	37	90	50	93	55	87	49	86	49	81	40	46	29	41	29			
4	26	19	37	24	43	30	64	24	80	41	90	57	95	64	96	51	59	44	85	40	48	34	41	26			
5	28	10	39	26	49	25	67	41	75	45	89	59	91	57	90	75	63	46	67	34	50	38	50	26			
6	23	5	49	28	52	25	71	39	60	45	88	51	84	55	96	59	73	51	47	30	50	35	53	36			
7	26	7	49	29	61	37	47	29	63	40	71	51	89	55	89	57	84	53	53	33	48	35	51	39			
8	36	21	50	28	41	32	57	31	61	35	73	49	91	53	77	52	65	41	58	31	46	29	41	32			
9	45	29	53	29	45	24	65	29	57	41	63	47	89	58	82	44	65	32	59	43	48	38	40	32			
10	46	33	54	30	45	26	49	35	49	35	60	40	82	60	88	48	76	35	59	36	46	32	37	24			
11	40	33	52	32	44	25	44	26	54	27	63	41	89	53	96	51	70	37	75	39	51	36	36	22			
12	37	27	55	33	45	25	46	23	53	36	60	39	95	57	95	55	58	33	61	32	44	33	32	16			
13	47	41	49	34	53	33	45	27	49	33	58	45	80	53	85	58	55	30	60	28	43	26	35	18			
14	47	39	49	31	59	36	41	33	63	30	69	49	85	47	82	51	56	27	57	28	42	20	36	18			
15	47	38	56	35	49	34	44	30	74	33	70	50	94	50	91	49	61	28	60	23	42	29	38	28			
16	45	33	57	41	54	29	47	22	89	42	74	43	97	67	100	53	70	47	63	26	50	32	39	27			
17	49	40	43	33	39	28	53	25	79	53	77	46	89	57	87	57	80	39	65	28	51	30	30	20			
18	46	41	38	27	43	27	53	31	77	49	83	47	95	52	86	53	82	54	58	35	42	32	32	16			
19	49	41	43	22	45	22	43	34	73	47	88	51	100	59	90	50	55	39	60	32	44	30	28	10			
20	52	40	45	20	55	23	45	25	59	45	93	53	98	58	88	54	53	37	55	35	46	32	32	10			
21	54	40	48	22	52	30	47	21	73	45	95	52	91	64	89	52	59	35	53	33	43	20	33	20			
22	50	29	51	24	55	27	50	30	74	40	95	60	75	51	93	51	70	35	47	35	27	18	30	18			
23	53	36	54	26	57	29	55	29	63	45	95	61	82	48	95	55	63	36	53	37	35	27	31	10			
24	42	27	49	23	50	31	56	33	71	43	95	65	91	48	96	61	52	34	46	35	58	37	28	24			
25	39	25	53	24	51	26	51	29	82	43	95	63	85	55	91	57	59	25	42	32	47	33	29	12			
26	45	36	54	24	49	31	42	30	80	51	96	63	91	53	86	56	66	29	40	24	34	28	28	12			
27	45	29	58	26	52	25	44	24	69	46	69	57	88	60	87	50	74	32	44	20	43	35	30	16			
28	35	24	47	32	47	35	47	31	65	38	63	52	90	56	87	46	80	36	46	19	49	32	40	18			
29	37	20			41	33	54	37	69	37	67	42	83	52	87	50	82	37	50	21	42	28	40	28			
30	39	25			49	31	54	33	63	41	69	43	78	48	89	63	79	44	51	20	41	30	42	28			
31	41	25			45	26			71	35			87	47	94	60			59	31			43	28			
AV.	41	28	49	28	49	29	51	29	68	40	79	50	89	55	89	54	69	39	58	32	45	30	37	23			
MEAN	34.5		38.5		38.7		40.2		54.1		64.6		71.6		71.7		53.9		45.1		37.9		29.7				
STA AV	37	20	45	26	47	26	55	29	67	39	74	47	86	52	84	50	75	43	62	33	48	27	39	21			

NOTES: Temperature data taken from hygrothermograph record at station 076X59. STA AV is average for 8 yr (1963-70) record period.

1970	DAILY PRECIPITATION (inches)					REYNOLDS, IDAHO WATERSHED W-1 (036068)						
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.00	0.00	0.17	0.01	0.00	0.00	0.0	0.00	0.00	0.0	0.0	0.03
2	0.00	0.00	0.05	0.00	0.00	0.00	0.00	0.0	0.00	0.0	0.00	0.13
3	0.0	0.01	0.00	0.0	0.0	0.0	0.0	0.0	0.00	0.0	0.00	0.21
4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.33	0.00	0.01	0.05
5	0.00	0.0	0.00	0.0	0.04	0.00	0.36	0.06	0.05	0.00	0.21	0.00
6	0.00	0.0	0.00	0.00	0.06	0.04	0.00	0.00	0.00	0.01	0.12	0.00
7	0.00	0.0	0.58	0.00	0.00	0.09	0.0	0.0	0.00	0.00	0.03	0.31
8	0.11	0.00	0.11	0.0	0.21	0.13	0.02	0.00	0.00	0.00	0.17	0.09
9	0.16	0.0	0.00	0.00	0.16	0.05	0.02	0.0	0.00	0.22	0.41	0.04
10	0.20	0.0	0.00	0.46	0.15	0.11	0.00	0.00	0.00	0.10	0.00	0.02
11	0.03	0.00	0.11	0.02	0.01	0.00	0.0	0.00	0.0	0.01	0.39	0.03
12	0.15	0.20	0.01	0.00	0.04	0.01	0.00	0.00	0.00	0.01	0.04	0.00
13	0.06	0.00	0.06	0.36	0.07	0.04	0.00	0.00	0.0	0.00	0.00	0.00
14	0.31	0.00	0.20	0.50	0.00	0.05	0.0	0.0	0.0	0.00	0.00	0.04
15	0.03	0.0	0.00	0.01	0.00	0.04	0.0	0.0	0.0	0.0	0.00	0.07
16	0.62	0.24	0.29	0.00	0.00	0.00	0.00	0.00	0.0	0.00	0.0	0.18
17	0.38	0.24	0.11	0.05	0.0	0.02	0.0	0.00	0.0	0.00	0.00	0.00
18	0.37	0.01	0.00	0.00	0.0	0.00	0.0	0.0	0.01	0.00	0.09	0.01
19	0.29	0.0	0.0	0.31	0.06	0.0	0.00	0.00	0.33	0.01	0.00	0.00
20	0.05	0.0	0.0	0.00	0.09	0.00	0.05	0.0	0.15	0.15	0.00	0.10
21	0.65	0.0	0.0	0.0	0.01	0.00	0.00	0.0	0.00	0.05	0.00	0.10
22	0.54	0.0	0.0	0.0	0.10	0.00	0.00	0.0	0.00	0.07	0.14	0.02
23	0.12	0.0	0.00	0.0	0.28	0.06	0.0	0.00	0.0	0.75	0.54	0.02
24	0.26	0.0	0.00	0.02	0.00	0.00	0.0	0.00	0.0	0.02	0.77	0.01
25	0.04	0.0	0.0	0.12	0.00	0.00	0.0	0.00	0.0	0.14	0.32	0.01
26	0.65	0.0	0.11	0.17	0.07	0.04	0.00	0.00	0.0	0.17	0.08	0.02
27	0.59	0.00	0.0	0.02	0.01	0.39	0.00	0.0	0.0	0.00	0.01	0.05
28	0.00	0.07	0.04	0.07	0.00	0.45	0.00	0.0	0.0	0.0	0.00	0.22
29	0.00		0.16	0.00	0.00	0.06	0.0	0.01	0.0	0.0	0.25	0.21
30	0.0		0.08	0.00	0.00	0.00	0.00	0.11	0.0	0.0	0.28	0.04
31	0.11		0.0		0.00		0.0	0.01		0.00		0.09
TOTAL	5.75	0.79	2.10	2.13	1.36	1.60	0.46	0.20	0.87	1.72	3.87	2.12
STA AV	4.24	1.32	1.13	1.39	1.00	1.65	0.26	1.33	0.49	1.39	2.24	2.14

NOTES: Values are Thiessen weighted average 'Actual' amounts from 45 recording pairs of gages (shielded and unshielded). 'Actual' amounts were computed as per relationship developed by W. R. Hamon, "Computing Actual Precipitation", Proceedings of WMO-IDHS Symposium, Gailo, Norway, August, 1972. The equation used is: $\log_e (U/A) = \log_e (U/S) \times 1.80$, where U = unshielded catchment, S = shielded catchment, and A = actual amount of precipitation. STA AV values are based on 3 yr (1968-70) record period.

1970	DAILY PRECIPITATION (inches)					REYNOLDS, IDAHO WATERSHED W-1 (036068)						
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.00	0.00	0.10	0.00	0.00	0.00	0.0	0.00	0.00	0.0	0.0	0.02
2	0.00	0.00	0.03	0.00	0.00	0.00	0.00	0.0	0.00	0.0	0.00	0.10
3	0.0	0.01	0.00	0.0	0.0	0.0	0.0	0.0	0.00	0.0	0.00	0.15
4	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.28	0.00	0.01	0.03
5	0.00	0.0	0.00	0.0	0.03	0.00	0.33	0.06	0.04	0.00	0.17	0.00
6	0.00	0.0	0.00	0.00	0.05	0.03	0.00	0.00	0.00	0.01	0.09	0.00
7	0.00	0.0	0.47	0.00	0.00	0.08	0.0	0.0	0.00	0.00	0.03	0.23
8	0.07	0.00	0.07	0.0	0.17	0.12	0.02	0.00	0.00	0.00	0.12	0.05
9	0.11	0.0	0.00	0.00	0.13	0.05	0.02	0.0	0.00	0.18	0.33	0.02
10	0.13	0.0	0.00	0.33	0.12	0.10	0.00	0.00	0.00	0.08	0.00	0.01
11	0.01	0.00	0.08	0.01	0.01	0.00	0.0	0.00	0.0	0.00	0.30	0.02
12	0.11	0.18	0.00	0.0	0.03	0.00	0.00	0.00	0.00	0.01	0.03	0.00
13	0.04	0.00	0.04	0.16	0.06	0.04	0.00	0.00	0.0	0.00	0.00	0.00
14	0.23	0.00	0.14	0.24	0.00	0.05	0.0	0.0	0.0	0.0	0.00	0.02
15	0.02	0.0	0.00	0.00	0.00	0.03	0.0	0.0	0.0	0.0	0.00	0.04
16	0.49	0.20	0.17	0.00	0.00	0.00	0.00	0.00	0.0	0.00	0.0	0.10
17	0.29	0.19	0.07	0.04	0.0	0.02	0.0	0.00	0.0	0.00	0.00	0.00
18	0.28	0.01	0.00	0.00	0.0	0.00	0.0	0.0	0.01	0.00	0.07	0.00
19	0.24	0.0	0.0	0.18	0.05	0.0	0.00	0.00	0.29	0.01	0.00	0.00
20	0.04	0.0	0.0	0.00	0.08	0.00	0.05	0.0	0.13	0.12	0.00	0.05
21	0.55	0.0	0.0	0.0	0.01	0.00	0.00	0.0	0.00	0.04	0.00	0.05
22	0.45	0.0	0.0	0.0	0.09	0.00	0.00	0.0	0.00	0.05	0.11	0.01
23	0.10	0.0	0.00	0.0	0.24	0.06	0.0	0.00	0.0	0.58	0.43	0.01
24	0.22	0.0	0.00	0.01	0.00	0.00	0.0	0.00	0.0	0.01	0.63	0.01
25	0.03	0.0	0.0	0.06	0.00	0.00	0.0	0.00	0.0	0.11	0.26	0.01
26	0.55	0.0	0.05	0.07	0.06	0.03	0.00	0.00	0.0	0.12	0.06	0.01
27	0.48	0.00	0.0	0.01	0.01	0.34	0.00	0.0	0.0	0.00	0.01	0.02
28	0.00	0.04	0.02	0.03	0.0	0.39	0.00	0.0	0.0	0.0	0.00	0.11
29	0.00		0.07	0.00	0.00	0.06	0.0	0.01	0.0	0.0	0.19	0.10
30	0.0		0.04	0.00	0.00	0.00	0.00	0.10	0.0	0.0	0.22	0.02
31	0.08		0.0		0.00		0.0	0.01		0.00		0.05
TOTAL	4.53	0.63	1.37	1.16	1.11	1.43	0.43	0.19	0.77	1.32	3.07	1.25
STA AV												

NOTES: Values are Thiessen weighted average amounts from 45 unshielded recording gages. STA AV do not apply to unshielded rain gage records.

1970	DAILY PRECIPITATION (inches)					REYNOLDS, IDAHO WATERSHED W-1 (036068)						
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.00	0.00	0.13	0.00	0.00	0.00	0.0	0.00	0.00	0.0	0.0	0.02
2	0.00	0.00	0.04	0.00	0.00	0.00	0.00	0.0	0.00	0.0	0.00	0.11
3	0.0	0.01	0.00	0.0	0.0	0.0	0.0	0.0	0.00	0.0	0.00	0.18
4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.31	0.00	0.01	0.04
5	0.00	0.0	0.00	0.0	0.03	0.00	0.35	0.06	0.05	0.00	0.19	0.00
6	0.00	0.0	0.00	0.00	0.05	0.04	0.00	0.00	0.00	0.01	0.10	0.00
7	0.00	0.0	0.53	0.00	0.00	0.09	0.0	0.0	0.00	0.00	0.03	0.27
8	0.09	0.00	0.09	0.0	0.19	0.13	0.02	0.00	0.00	0.00	0.15	0.07
9	0.14	0.0	0.00	0.00	0.14	0.05	0.02	0.0	0.00	0.20	0.37	0.03
10	0.16	0.0	0.00	0.39	0.13	0.11	0.00	0.00	0.00	0.09	0.00	0.01
11	0.02	0.00	0.09	0.02	0.01	0.00	0.0	0.00	0.0	0.01	0.35	0.03
12	0.13	0.19	0.00	0.00	0.04	0.01	0.00	0.00	0.00	0.01	0.03	0.00
13	0.05	0.00	0.05	0.25	0.07	0.04	0.00	0.00	0.0	0.00	0.00	0.00
14	0.27	0.00	0.17	0.35	0.00	0.05	0.0	0.0	0.0	0.00	0.00	0.03
15	0.03	0.0	0.00	0.00	0.00	0.03	0.0	0.0	0.0	0.0	0.00	0.06
16	0.55	0.22	0.23	0.00	0.00	0.00	0.00	0.00	0.0	0.00	0.0	0.14
17	0.33	0.21	0.09	0.04	0.0	0.02	0.0	0.00	0.0	0.00	0.00	0.00
18	0.32	0.01	0.00	0.00	0.0	0.00	0.0	0.0	0.01	0.00	0.08	0.00
19	0.26	0.0	0.0	0.24	0.05	0.0	0.00	0.00	0.31	0.01	0.00	0.00
20	0.04	0.0	0.0	0.00	0.08	0.00	0.05	0.0	0.14	0.14	0.00	0.07
21	0.60	0.0	0.0	0.0	0.01	0.00	0.00	0.0	0.00	0.05	0.00	0.08
22	0.50	0.0	0.0	0.0	0.09	0.00	0.00	0.0	0.00	0.06	0.12	0.02
23	0.11	0.0	0.00	0.0	0.26	0.06	0.0	0.00	0.0	0.67	0.49	0.01
24	0.24	0.0	0.00	0.01	0.00	0.00	0.0	0.00	0.0	0.02	0.70	0.01
25	0.03	0.0	0.0	0.09	0.00	0.00	0.0	0.00	0.0	0.13	0.29	0.01
26	0.60	0.0	0.08	0.12	0.06	0.04	0.00	0.00	0.0	0.15	0.07	0.02
27	0.53	0.00	0.0	0.01	0.01	0.37	0.00	0.0	0.0	0.00	0.01	0.03
28	0.00	0.06	0.03	0.05	0.00	0.41	0.00	0.0	0.0	0.0	0.00	0.16
29	0.00		0.11	0.00	0.00	0.06	0.0	0.01	0.0	0.0	0.22	0.15
30	0.0		0.06	0.00	0.00	0.00	0.00	0.11	0.0	0.0	0.25	0.03
31	0.10		0.0		0.00		0.0	0.01		0.00		0.06
TOTAL	5.12	0.71	1.71	1.59	1.24	1.51	0.45	0.19	0.82	1.54	3.49	1.67
STA AV												

NOTES: Values are Thiessen weighted average amounts from 45 shielded recording gages. STA AV do not apply to shielded rain gage records.

1970	MEAN DAILY DISCHARGE (cfs)					REYNOLDS, IDAHO WATERSHED W-1 (036068)						
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	2.02	36.67	17.50	18.10	10.43	47.63	11.15	1.47	1.80	1.01	1.34	14.85
2	2.15	30.01	17.10	18.99	10.49	43.47	9.63	1.63	1.73	0.86	1.33	15.23
3	2.75	29.18	15.55	17.36	16.34	35.58	7.66	1.73	1.70	0.92	1.33	11.61
4	3.73	25.26	14.49	17.63	25.40	35.24	5.57	1.80	1.60	0.88	1.31	15.17
5	2.62	22.48	13.45	18.82	39.30	32.09	5.37	1.84	1.53	0.87	1.41	13.57
6	7.07	21.71	13.03	22.37	46.78	25.60	8.47	1.80	1.53	0.96	1.71	19.94
7	10.85	21.30	21.03	22.05	46.84	25.39	6.12	1.88	1.53	0.96	1.73	33.48
8	9.67	20.94	51.85	19.72	51.77	24.94	6.07	1.95	1.53	1.00	1.73	58.29
9	2.52	20.54	19.48	20.77	75.35	29.88	5.73	1.95	1.53	1.15	2.18	39.36
10	6.03	20.24	24.40	33.85	67.55	28.21	5.56	1.81	1.53	1.19	2.29	26.99
11	5.75	20.25	22.79	31.55	52.45	22.12	4.98	1.57	1.53	1.07	2.75	23.86
12	5.78	23.44	22.33	21.91	40.90	18.68	4.69	1.90	1.53	0.97	3.22	13.18
13	4.38	27.68	21.78	21.20	38.70	18.99	4.49	1.71	1.53	1.01	2.28	14.37
14	6.30	22.20	30.48	29.08	31.81	18.36	4.49	1.59	1.47	1.02	1.91	17.24
15	7.73	21.25	31.87	21.89	36.54	18.36	4.84	1.57	1.35	1.02	2.02	14.94
16	10.96	20.20	29.78	24.35	56.88	17.87	4.79	1.64	1.20	1.19	1.86	14.56
17	18.28	37.26	32.92	29.63	94.56	17.72	4.49	1.96	1.07	1.21	1.87	11.67
18	30.53	26.93	27.29	31.32	110.19	16.27	4.49	1.92	1.01	1.24	1.98	9.84
19	51.82	22.31	28.64	33.76	95.87	14.57	4.47	1.67	1.17	1.20	2.60	5.73
20	49.15	20.70	28.44	26.72	90.13	13.90	3.06	1.56	1.23	1.26	3.59	11.49
21	95.85	19.90	27.72	27.80	89.74	12.50	1.99	1.50	1.29	1.31	3.39	15.65
22	176.95	18.79	26.94	27.70	97.19	9.40	1.80	1.70	1.19	1.34	2.74	11.20
23	179.32	18.34	26.33	24.39	113.19	9.40	1.64	1.88	1.13	2.06	5.39	8.84
24	129.51	17.21	25.26	20.76	107.72	7.66	1.35	1.95	1.13	2.22	36.49	12.39
25	62.18	16.55	26.44	14.27	101.07	6.43	1.23	1.98	1.18	1.77	54.09	10.83
26	60.34	16.70	26.35	13.48	100.94	5.75	1.23	2.02	1.17	1.72	26.37	13.40
27	326.04	16.02	22.74	13.15	102.21	6.32	1.23	2.02	1.11	1.28	16.03	17.47
28	93.38	16.11	21.01	11.57	84.35	10.28	1.13	2.02	1.12	1.24	11.52	11.52
29	56.56		20.32	11.18	71.46	11.79	1.03	1.95	1.10	1.24	10.01	9.61
30	41.32		20.66	11.18	59.69	10.08	1.17	1.87	1.14	1.33	20.41	9.45
31	42.40		18.17		51.67		1.31	1.87		1.31		10.03
MEAN	48.514	22.506	24.069	21.884	65.081	19.816	4.233	1.797	1.356	1.220	7.563	16.638
INCHES	0.620	0.260	0.308	0.271	0.832	0.245	0.054	0.023	0.017	0.016	0.094	0.213
STA AV	0.468	0.277	0.241	0.491	0.546	0.290	0.035	0.024	0.013	0.017	0.041	0.235

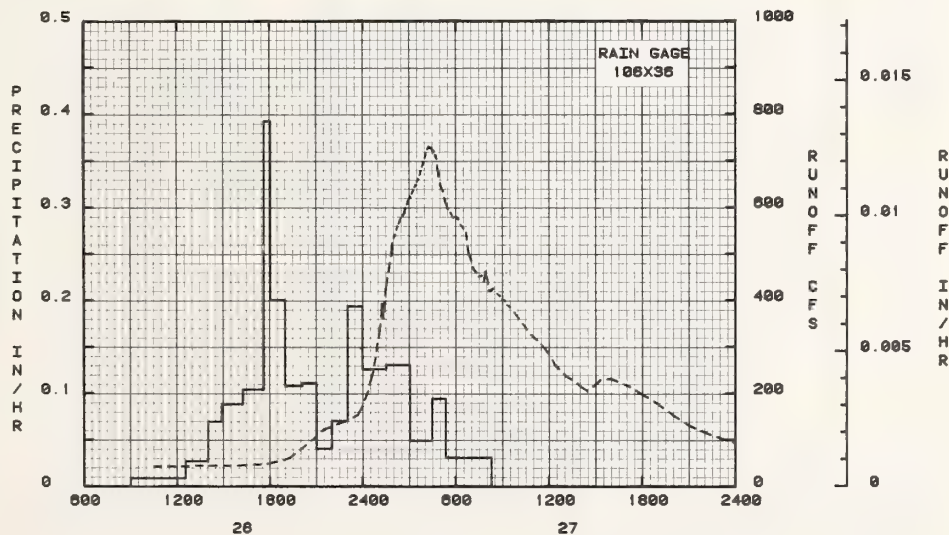
NOTES: To convert CFS to IN/DAY, multiply by 0.000413. STA AV based on 8 yr (1963-70) record period.

1970 SELECTED RUNOFF EVENT			REYNOLDS, IDAHO WATERSHED W-1 (036068)							
ANTECEDENT CONDITIONS			RAINFALL				RUNOFF			
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)
EVENT OF JANUARY 26 - 28, 1970										
RG 106X36			RG 106X36							
1-26	0.2	0.009	1-26	901	0.0	0.0	1-26	1030	42.486	0.0
				1233	0.0085	0.03		1630	44.526	0.0045
				1402	0.0270	0.07		1800	48.787	0.0057
				1454	0.0692	0.13		1915	59.540	0.0069
				1616	0.0878	0.25		2020	87.983	0.0083
WATERSHED CONDITIONS: Runoff event was caused by a sustained winter rain followin about 10 days of intermittent rain and snowmelt.				1737	0.1037	0.39		2130	121.919	0.0104
				1803	0.3923	0.56		2300	140.468	0.0138
				1900	0.2000	0.75		2340	153.211	0.0155
				2007	0.1075	0.87		2400	171.716	0.0164
				2101	0.1111	0.97	1-27	20	203.872	0.0175
				2201	0.0400	1.01		40	246.169	0.0188
				2301	0.0700	1.08		110	347.992	0.0214
				2400	0.1932	1.27		115	392.729	0.0219
			1-27	131	0.1253	1.46		120	359.626	0.0224
				303	0.1304	1.66		125	395.230	0.0229
				430	0.0483	1.73		130	422.801	0.0235
				521	0.0941	1.81		135	446.235	0.0241
				818	0.0305	1.90		140	462.158	0.0247
								145	479.945	0.0254
								150	497.072	0.0261
								155	521.800	0.0268
								200	533.181	0.0276
								205	540.420	0.0284
								210	550.721	0.0292
								215	558.198	0.0300
								220	564.253	0.0308
								225	573.459	0.0316
								230	578.118	0.0324
								235	582.815	0.0332
								240	585.969	0.0340
								245	597.136	0.0348
								250	605.245	0.0357
								255	613.461	0.0366
								300	618.447	0.0375
								305	621.792	0.0384
								310	628.535	0.0393
								315	637.070	0.0402
								320	642.246	0.0411
								325	647.464	0.0420
								330	654.488	0.0429
								335	659.804	0.0438
								340	668.762	0.0448
								345	677.844	0.0458
								350	687.047	0.0468
								355	696.375	0.0478
								400	705.831	0.0488
								405	715.414	0.0498
								410	723.174	0.0508
								415	729.050	0.0518
								420	727.085	0.0528
								425	725.126	0.0538
								430	721.226	0.0548
								435	717.345	0.0558
								440	711.564	0.0568
								445	703.928	0.0578
								450	683.351	0.0588
								455	665.166	0.0598
								500	647.464	0.0607
								510	633.643	0.0625
								520	611.810	0.0643
								530	595.529	0.0660
								540	587.551	0.0677
								550	576.562	0.0694
								600	579.680	0.0711
								610	573.459	0.0728
								620	561.219	0.0744
								630	553.700	0.0760
								640	544.812	0.0776
								650	501.110	0.0791
								700	483.844	0.0805
								710	464.658	0.0819
								720	458.435	0.0832
								730	449.860	0.0845
								740	452.293	0.0858
								750	439.072	0.0871

NOTES: To convert CFS to IN/HR, multiply by 0.00001719.

1970 SELECTED RUNOFF EVENT			REYNOLDS, IDAHO WATERSHED W-1 (036068)					
ANTECEDENT CONDITIONS			RAINFALL			RUNOFF		
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day
EVENT OF JANUARY 26 - 28, 1970 (CONTINUED)								
							1-27	755
								800
								810
								825
								840
								850
								900
								910
								920
								930
								1055
								1115
								1130
								1200
								1225
								1240
								1305
								1430
								1520
								1600
								1715
								1800
								1900
								2000
								2100
								2200
								2300
								2400
							1-28	130
								310
								520
								700
								830
								930
								1330
								1625
								1900
								2125
								2400

NOTES: To convert CFS to IN/HR, multiply by 0.00001719.



EVENT OF JANUARY 26 - 28, 1970
REYNOLDS, IDAHO WATERSHED W-1 (036068)

REYNOLDS, IDAHO SALMON CREEK WATERSHED (046017)

LOCATION: Owyhee County, Idaho; 34 miles south of Nampa; east flowing tributary to Reynolds Creek, Snake River Basin.

AREA: 8990.00 acres 14.05 sq. miles

MONTHLY PRECIPITATION AND RUNOFF (inches)															REYNOLDS, IDAHO SALMON CREEK WATERSEED (046017)														
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual															
1970	P	6.75	0.99	2.97	2.85	1.98	1.94	0.45	0.07	1.26	2.38	4.23	2.01	27.49															
	Q	1.220	0.324	0.441	0.460	0.355	0.107	0.023	0.002	0.006	0.036	0.125	0.276	3.374															
STA AV	P	4.55	1.57	1.46	1.90	1.44	1.98	0.23	1.22	0.68	1.83	2.37	2.16	21.38															
	Q	0.773	0.369	0.319	0.412	0.312	0.140	0.025	0.047	0.022	0.036	0.070	0.120	2.647															
ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																													
		Maximum Discharge		1 Hour		2 Hours		Maximum Volume for Selected Time Interval		6 Hours		12 Hours		1 Day		2 Days		8 Days											
		Date	Rate	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.										
1970		1-27	0.023	1-27	0.021	1-27	0.039	1-27	0.091	1-27	0.143	1-26	0.199	1-21	0.297	1-19	0.811												
MAXIMUMS FOR PERIOD OF RECORD																													
		8-23	0.073	8-23	0.044	8-23	0.056	1-20	0.115	1-28	0.268	1-28	0.379	1-28	0.766	1-28	1.495												
		1965		1965		1965		1969		1965		1965		1965		1965													

NOTES: Watershed conditions: Predominately sagebrush rangeland, 99%; irrigated pasture and hay crops, 1%. For map of Watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1965, USDA Misc. PDB. 1216, P. 68.2-7. Records began 1963. Precipitation: Thiessen weighted average 'Computed Actual' amounts from 9 rain gages. Station average precipitation amounts are based on 1968-70 data. Station average runoff amounts are based on record period (1963-70). For long-time precipitation records, see National Weather Service records at Boise, Idaho; 59 miles N.E. of watershed.

1970 DAILY PRECIPITATION (inches)													REYNOLDS, IDAHO SALMON CREEK WATERSHED (046017)												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec													
1	0.00	0.0	0.20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.03													
2	0.0	0.0	0.02	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.10													
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.0	0.0	0.12													
4	0.01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.48	0.0	0.0	0.07													
5	0.00	0.0	0.00	0.0	0.09	0.00	0.38	0.0	0.15	0.00	0.09	0.01													
6	0.0	0.0	0.0	0.00	0.09	0.04	0.0	0.0	0.00	0.06	0.09	0.01													
7	0.0	0.0	0.85	0.0	0.00	0.27	0.0	0.0	0.0	0.0	0.02	0.29													
8	0.12	0.0	0.09	0.0	0.22	0.04	0.02	0.00	0.01	0.00	0.26	0.08													
9	0.22	0.0	0.0	0.00	0.16	0.08	0.0	0.0	0.00	0.24	0.44	0.02													
10	0.34	0.0	0.0	0.76	0.21	0.10	0.0	0.0	0.0	0.20	0.01	0.03													
11	0.07	0.00	0.15	0.01	0.02	0.0	0.0	0.00	0.0	0.0	0.35	0.02													
12	0.13	0.25	0.02	0.0	0.06	0.01	0.0	0.0	0.0	0.0	0.05	0.0													
13	0.01	0.0	0.14	0.39	0.16	0.03	0.0	0.00	0.0	0.0	0.0	0.0													
14	0.43	0.0	0.22	0.82	0.0	0.04	0.0	0.0	0.0	0.0	0.0	0.01													
15	0.01	0.0	0.00	0.0	0.0	0.02	0.0	0.0	0.0	0.0	0.0	0.08													
16	0.76	0.30	0.44	0.00	0.0	0.01	0.00	0.0	0.0	0.0	0.0	0.21													
17	0.43	0.21	0.23	0.15	0.0	0.02	0.0	0.00	0.0	0.00	0.0	0.0													
18	0.61	0.61	0.0	0.0	0.0	0.00	0.0	0.0	0.05	0.00	0.11	0.00													
19	0.50	0.0	0.0	0.27	0.25	0.0	0.0	0.0	0.36	0.00	0.0	0.03													
20	0.04	0.0	0.0	0.0	0.08	0.0	0.05	0.0	0.19	0.20	0.0	0.08													
21	0.84	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.01	0.04	0.0	0.19													
22	0.59	0.0	0.0	0.0	0.08	0.0	0.0	0.0	0.0	0.07	0.16	0.04													
23	0.06	0.0	0.9	0.0	0.50	0.00	0.0	0.0	0.0	0.98	0.81	0.10													
24	0.28	0.0	0.0	0.02	0.0	0.0	0.0	0.0	0.0	0.01	0.69	0.07													
25	0.01	0.0	0.0	0.14	0.0	0.00	0.0	0.00	0.0	0.16	0.46	0.04													
26	0.58	0.0	0.16	0.17	0.06	0.11	0.0	0.00	0.0	0.11	0.08	0.00													
27	0.61	0.0	0.0	0.01	0.00	0.48	0.00	0.0	0.0	0.0	0.01	0.02													
28	0.0	0.12	0.07	0.11	0.0	0.64	0.0	0.0	0.0	0.0	0.0	0.03													
29	0.0		0.25	0.0	0.0	0.05	0.0	0.00	0.0	0.0	0.23	0.18													
30	0.0		0.10	0.00	0.0	0.0	0.0	0.04	0.0	0.0	0.38	0.03													
31	0.10		0.0		0.0		0.0	0.02		0.0	0.12														
TOTAL		6.75	0.90	2.97	2.85	1.98	1.94	0.45	0.07	1.26	2.08	2.01													
STA AV		4.55	1.57	1.46	1.90	1.44	1.98	0.23	1.22	0.68	1.83	2.16													

NOTES: Values are Thiessen weighted average 'Actual' amounts from 9 recording pairs of gages (shielded and unshielded). 'Actual' amounts were computed as per relationship developed by W. R. Baason, "Computing Actual Precipitation", Proceedings WHO-IDHS Symposium, Geilo, Norway, August, 1972. The equation used is: $\log_e (U/A) = \log_e (U/S) \times 1.80$, where U = unshielded catchment, S = shielded catchment, and A = actual amount of precipitation. STA AV values are based on 3 yr (1968-70) record period. For temperature information, see table of daily maximum and minimum values included for Watershed 68.001.

1970 DAILY PRECIPITATION (inches) REYNOLDS, IDAHO SALMON CREEK WATERSHED (046017)												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.00	0.0	0.11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.03
2	0.0	0.0	0.01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.08
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.0	0.0	0.09
4	0.01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.44	0.0	0.0	0.05
5	0.00	0.0	0.00	0.0	0.08	0.00	0.34	0.0	0.14	0.00	0.08	0.00
6	0.0	0.0	0.0	0.00	0.07	0.03	0.0	0.0	0.00	0.05	0.07	0.01
7	0.0	0.0	0.63	0.0	0.00	0.24	0.0	0.0	0.0	0.0	0.02	0.24
8	0.08	0.0	0.07	0.0	0.20	0.03	0.02	0.00	0.01	0.00	0.20	0.06
9	0.14	0.0	0.0	0.00	0.12	0.08	0.0	0.0	0.00	0.20	0.36	0.02
10	0.22	0.0	0.0	0.44	0.15	0.09	0.0	0.0	0.0	0.17	0.00	0.02
11	0.04	0.00	0.12	0.00	0.01	0.0	0.0	0.00	0.0	0.0	0.27	0.01
12	0.10	0.23	0.02	0.0	0.05	0.01	0.0	0.0	0.0	0.0	0.03	0.0
13	0.01	0.0	0.08	0.15	0.15	0.03	0.0	0.00	0.0	0.0	0.0	0.0
14	0.27	0.0	0.18	0.32	0.0	0.04	0.0	0.0	0.0	0.0	0.0	0.00
15	0.01	0.0	0.00	0.0	0.0	0.02	0.0	0.0	0.0	0.0	0.0	0.04
16	0.62	0.25	0.19	0.00	0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.13
17	0.33	0.17	0.09	0.11	0.0	0.02	0.0	0.00	0.0	0.00	0.0	0.0
18	0.37	0.01	0.0	0.0	0.0	0.00	0.0	0.0	0.05	0.00	0.09	0.00
19	0.39	0.0	0.0	0.11	0.21	0.0	0.0	0.0	0.33	0.00	0.0	0.01
20	0.03	0.0	0.0	0.0	0.07	0.0	0.05	0.0	0.17	0.16	0.0	0.03
21	0.74	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.01	0.03	0.0	0.09
22	0.54	0.0	0.0	0.0	0.07	0.0	0.0	0.0	0.0	0.05	0.11	0.02
23	0.05	0.0	0.0	0.0	0.44	0.0	0.0	0.0	0.0	0.79	0.60	0.04
24	0.26	0.0	0.0	0.01	0.0	0.0	0.0	0.0	0.0	0.01	0.54	0.03
25	0.00	0.0	0.0	0.06	0.0	0.0	0.0	0.00	0.0	0.13	0.37	0.02
26	0.45	0.0	0.08	0.07	0.05	0.10	0.0	0.00	0.0	0.09	0.06	0.00
27	0.47	0.0	0.0	0.00	0.00	0.42	0.00	0.0	0.0	0.0	0.00	0.01
28	0.0	0.06	0.03	0.05	0.0	0.55	0.0	0.0	0.0	0.0	0.0	0.02
29	0.0	0.0	0.12	0.0	0.0	0.05	0.0	0.00	0.0	0.0	0.18	0.09
30	0.0	0.0	0.05	0.00	0.0	0.0	0.0	0.04	0.0	0.0	0.30	0.01
31	0.10	0.0	0.0	0.0	0.0	0.0	0.0	0.02	0.0	0.0	0.0	0.07
TOTAL	5.22	0.73	1.79	1.33	1.66	1.71	0.41	0.07	1.14	1.69	3.28	1.24
STA AV												

NOTES: Values are Thiessen weighted average amounts from 9 unshielded recording gages. STA AV do not apply to unshielded rain gage records.

1970 DAILY PRECIPITATION (inches) REYNOLDS, IDAHO SALMON CREEK WATERSHED (046017)												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.00	0.0	0.15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.03
2	0.0	0.0	0.02	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.10
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.0	0.0	0.11
4	0.01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.46	0.0	0.0	0.06
5	0.00	0.0	0.00	0.0	0.09	0.00	0.36	0.0	0.14	0.00	0.09	0.09
6	0.0	0.0	0.0	0.00	0.08	0.04	0.0	0.0	0.00	0.06	0.08	0.02
7	0.0	0.0	0.74	0.0	0.00	0.26	0.0	0.0	0.0	0.0	0.02	0.26
8	0.10	0.0	0.08	0.0	0.21	0.04	0.02	0.00	0.01	0.00	0.23	0.07
9	0.19	0.0	0.0	0.00	0.13	0.08	0.0	0.0	0.00	0.22	0.40	0.02
10	0.28	0.0	0.0	0.59	0.17	0.10	0.0	0.0	0.0	0.18	0.00	0.03
11	0.05	0.00	0.14	0.00	0.02	0.0	0.0	0.00	0.0	0.0	0.31	0.01
12	0.12	0.24	0.02	0.0	0.05	0.01	0.0	0.0	0.0	0.0	0.04	0.0
13	0.01	0.0	0.10	0.25	0.15	0.03	0.0	0.00	0.0	0.0	0.0	0.0
14	0.34	0.0	0.20	0.53	0.0	0.04	0.0	0.0	0.0	0.0	0.0	0.01
15	0.01	0.0	0.00	0.0	0.0	0.02	0.0	0.0	0.0	0.0	0.0	0.06
16	0.69	0.28	0.30	0.00	0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.17
17	0.38	0.19	0.15	0.13	0.0	0.02	0.0	0.00	0.0	0.00	0.0	0.0
18	0.48	0.01	0.0	0.0	0.0	0.00	0.0	0.0	0.05	0.00	0.10	0.00
19	0.44	0.0	0.0	0.18	0.23	0.0	0.0	0.0	0.35	0.00	0.0	0.02
20	0.04	0.0	0.0	0.0	0.07	0.0	0.05	0.0	0.18	0.18	0.0	0.05
21	0.79	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.01	0.04	0.0	0.14
22	0.56	0.0	0.0	0.0	0.08	0.0	0.0	0.0	0.0	0.07	0.13	0.03
23	0.06	0.0	0.0	0.0	0.47	0.00	0.0	0.0	0.0	0.89	0.71	0.06
24	0.27	0.0	0.0	0.01	0.0	0.0	0.0	0.0	0.0	0.01	0.62	0.05
25	0.01	0.0	0.0	0.09	0.0	0.00	0.0	0.00	0.0	0.14	0.42	0.03
26	0.51	0.0	0.11	0.12	0.05	0.10	0.0	0.00	0.0	0.10	0.07	0.00
27	0.53	0.0	0.0	0.01	0.00	0.45	0.00	0.0	0.0	0.0	0.01	0.01
28	0.0	0.09	0.05	0.07	0.0	0.58	0.0	0.0	0.0	0.0	0.0	0.02
29	0.0	0.0	0.18	0.0	0.0	0.05	0.0	0.00	0.0	0.0	0.21	0.13
30	0.0	0.0	0.07	0.00	0.0	0.0	0.0	0.04	0.0	0.0	0.34	0.02
31	0.10	0.0	0.0	0.0	0.0	0.0	0.0	0.02	0.0	0.0	0.0	0.09
TOTAL	5.95	0.81	2.32	2.00	1.81	1.81	0.43	0.07	1.20	1.91	3.78	1.60
STA AV												

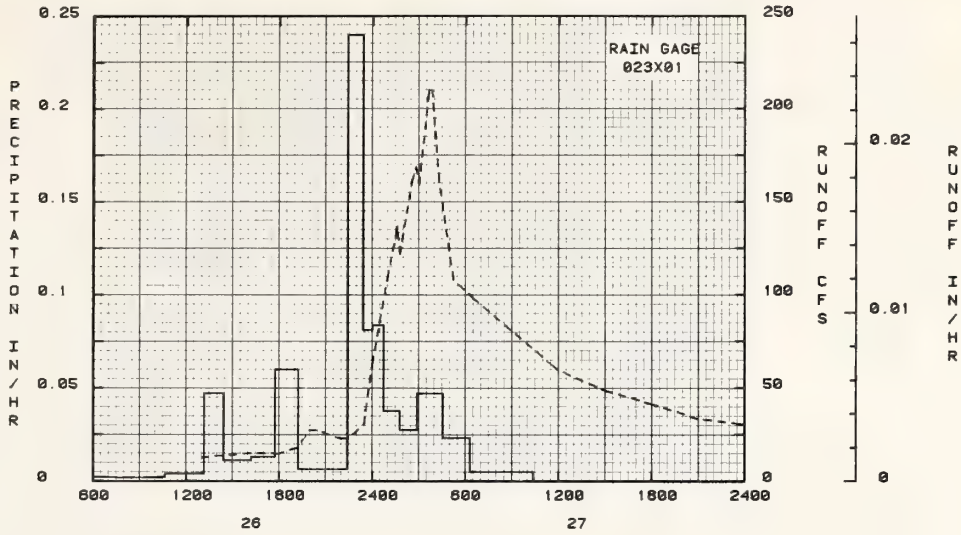
NOTES: Values are Thiessen weighted average amounts from 9 shielded recording gages. STA AV do not apply to shielded rain gage records.

1970 REYNOLDS, IDAHO SALMON CREEK WATERSHED (046017)												
MEAN DAILY DISCHARGE (cfs)												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.608	8.146	3.261	4.083	6.182	2.129	0.853	0.056	0.016	0.154	0.541	3.071
2	0.528	6.845	3.110	3.960	6.196	1.994	0.689	0.062	0.012	0.195	0.570	3.049
3	0.567	6.534	3.092	3.722	6.140	1.845	0.548	0.062	0.009	0.203	0.564	2.594
4	0.708	5.564	2.924	3.623	5.927	1.737	0.477	0.062	0.009	0.204	0.550	3.240
5	0.847	5.053	2.627	3.625	5.990	1.650	0.591	0.056	0.009	0.181	0.652	3.346
6	0.970	4.839	2.602	3.599	6.028	1.498	0.942	0.036	0.009	0.286	0.718	5.828
7	1.013	4.552	4.755	3.511	5.509	1.882	0.540	0.042	0.006	0.283	0.711	7.202
8	1.056	4.163	7.968	3.369	5.514	1.818	0.396	0.051	0.004	0.313	0.729	10.261
9	1.034	3.976	5.714	3.254	5.617	1.830	0.370	0.035	0.002	0.400	1.093	7.767
10	1.035	3.809	5.349	4.480	5.523	1.853	0.414	0.031	0.0	0.518	1.126	5.937
11	0.907	3.649	5.136	4.166	5.048	1.595	0.344	0.031	0.0	0.400	1.277	5.114
12	0.985	4.071	5.071	3.650	4.912	1.577	0.251	0.031	0.0	0.318	1.313	3.733
13	1.345	4.088	5.253	3.737	4.901	1.675	0.231	0.031	0.0	0.341	1.042	3.367
14	2.844	3.607	6.635	3.966	4.402	1.597	0.237	0.031	0.0	0.359	0.926	3.301
15	3.375	3.418	6.414	4.453	4.015	1.491	0.199	0.031	0.0	0.351	0.970	2.992
16	7.342	3.327	6.529	5.075	3.771	1.421	0.163	0.027	0.0	0.361	0.949	3.042
17	17.874	6.641	7.018	7.004	3.607	1.291	0.142	0.019	0.0	0.360	0.929	2.463
18	25.914	5.053	6.682	8.671	3.528	1.145	0.156	0.016	0.0	0.387	1.025	1.950
19	32.363	4.187	6.741	10.317	3.683	1.005	0.149	0.016	0.098	0.420	0.949	0.957
20	23.723	3.992	6.928	9.241	3.778	0.875	0.113	0.012	0.174	0.454	0.888	1.566
21	36.558	3.857	6.954	8.894	3.254	0.787	0.103	0.009	0.197	0.455	0.824	2.735
22	69.211	3.721	6.734	8.292	3.070	0.660	0.090	0.004	0.172	0.515	0.705	2.508
23	34.258	3.535	6.460	8.049	4.359	0.592	0.093	0.0	0.145	1.135	1.540	1.997
24	27.027	3.212	6.285	7.946	3.451	0.492	0.088	0.0	0.175	1.078	3.537	2.046
25	16.356	3.179	5.896	7.729	3.161	0.444	0.074	0.0	0.200	0.771	6.719	1.632
26	16.683	3.092	5.974	7.763	3.081	0.406	0.068	0.0	0.214	0.770	4.372	1.854
27	75.219	3.092	5.370	7.177	3.006	0.888	0.056	0.0	0.214	0.476	3.240	2.008
28	23.855	3.124	5.054	6.867	2.784	1.751	0.056	0.0	0.213	0.464	2.621	2.118
29	15.512		5.079	6.833	2.671	1.494	0.056	0.0	0.203	0.513	2.535	2.162
30	11.722		4.828	6.582	2.473	1.061	0.056	0.004	0.173	0.544	3.672	2.162
31	9.369		4.095		2.331		0.056	0.012		0.523		2.135
MEAN	14.866	4.369	5.371	5.788	4.320	1.349	0.277	0.025	0.075	0.443	1.576	3.359
INCHES	1.220	0.324	0.441	0.460	0.355	0.107	0.023	0.002	0.006	0.036	0.125	0.276
STA AV	0.773	0.369	0.319	0.412	0.312	0.140	0.025	0.047	0.022	0.036	0.070	0.120

NOTES: To convert CFS to IN/DAY, multiply by .002648. STA AV amounts are based on 1963-70 record period.

1970 REYNOLDS, IDAHO SALMON CREEK WATERSHED (046017)												
ANTECEDENT CONDITIONS				RAINFALL				RUNOFF				
Date	Rainfall	Runoff		Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.	
Mo-Day	(inches)	(inches)		Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)	
EVENT OF JANUARY 26 - 27, 1970												
RG 023X01				RG 023X01								
1-26	0.0	0.020		1-26	600	0.0	0.0	1-26	1300	12.767	0.0	
					1038	0.0022	0.01		1610	15.084	0.0049	
					1309	0.0040	0.02		1750	14.585	0.0076	
					1425	0.0474	0.08		1912	17.893	0.0100	
					1613	0.0111	0.10		1958	27.274	0.0119	
WATERSHED CONDITIONS:					1745	0.0130	0.12		2022	27.275	0.0131	
Runoff event was caused by a					1915	0.0600	0.21		2156	22.747	0.0174	
sustained winter rain fol-					2223	0.0064	0.23		2226	22.747	0.0187	
lowing about 10 days of inter-					2323	0.2400	0.47		2328	30.663	0.0217	
mittent rain and snowmelt.					2400	0.0811	0.52		2400	63.215	0.0245	
				1-27	43	0.0837	0.58	1-27	58	109.031	0.0337	
					147	0.0375	0.62		136	136.727	0.0423	
					253	0.0273	0.65		146	121.804	0.0447	
					435	0.0471	0.73		232	160.656	0.0566	
					619	0.0231	0.77		248	168.755	0.0614	
					1023	0.0049	0.79		300	159.332	0.0650	
									338	210.159	0.0779	
									350	210.159	0.0825	
									418	160.656	0.0920	
									514	108.009	0.1058	
									630	98.136	0.1202	
									1156	59.717	0.1675	
									1502	48.194	0.1860	
									1758	41.401	0.2005	
									2058	33.381	0.2129	
									2400	30.225	0.2235	

NOTES: To convert CFS to IN/HR, multiply by .0001103.



EVENT OF JANUARY 26 - 27, 1970
REYNOLDS, IDAHO SALMON CREEK WATERSHED (046017)

REYNOLDS, IDAHO BACKS CREEK WATERSHED (046084)

LOCATION: Owyhee County, Idaho; 34 miles south of Nampa; east flowing tributary to Reynolds Creek, Snake River Basin.

AREA: 7846.00 acres 12.26 sq. miles

MONTHLY PRECIPITATION AND RUNOFF (inches)														REYNOLDS, IDAHO BACKS CREEK WATERSHED (046084)													
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual													
1970	P	5.39	0.82	2.17	2.10	1.32	1.79	0.31	0.17	1.13	1.58	3.62	1.58	21.98													
	Q	0.860	0.243	0.356	0.240	0.162	0.026	0.007	0.003	0.001	0.002	0.037	0.157	2.096													
STA AV	P	3.95	1.31	1.18	1.49	1.06	1.82	0.18	1.18	0.67	1.41	2.08	1.75	18.08													
	Q	0.526	0.196	0.270	0.286	0.119	0.059	0.009	0.002	0.002	0.002	0.010	0.047	1.526													
ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																											
		Maximum Discharge Date	1 Hour Date	2 Hours Date	6 Hours Date	12 Hours Date	1 Day Date	2 Days Date	8 Days Date																		
1970		1-27 0.030	1-27 0.030	1-27 0.054	1-27 0.126	1-27 0.175	1-26 0.230	1-26 0.275	1-21 0.635																		
MAXIMUMS FOR PERIOD OF RECORD																											
		1-21 0.039	1-21 0.037	1-20 0.069	1-20 0.183	1-20 0.294	1-20 0.457	1-20 0.649	1-19 0.969																		
		1969	1969	1969	1969	1969	1969	1969	1969																		

NOTES: Watershed conditions: The watershed topography is steep, except in the lower valley, with numerous basalt outcrops at the higher elevations. 98% is sagebrush rangeland with a varying cover of sagebrush, bitterbrush, mountain mahogany and willow with a fair cover of forage plants such as cheatgrass, bluebunch wheatgrass, and Idaho fescue. 35% of area has a vegetative cover of 0-25%, 33% of the area has a vegetative cover of 26-50%, 18% of area has a vegetative cover of 51-75%, and 12% of the area has a vegetative cover of 76-100%. 2% of area is in pasture and haycrops which receives limited irrigation. For map of Watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1966, USDA Misc. Pub. 1226, p. 68.3-4. Records began 1963. Precipitation: Thiessen weighted average 'Computed Actual' amounts from 12 rain gages. Station average precipitation amounts are based on 1968-70 record period. Station average streamflow amounts are based on 1963-70. For long-time precipitation records, see National Weather Service records at Boise, Idaho; 50 miles N.E. of watershed.

1970 DAILY PRECIPITATION (inches)														REYNOLDS, IDAHO BACKS CREEK WATERSHED (046084)														
	Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec															
	1	0.00	0.09	0.21	0.0	0.01	0.0	0.0	0.01	0.0	0.0	0.0	0.03															
	2	0.0	0.0	0.04	0.01	0.01	0.00	0.00	0.0	0.0	0.0	0.00	0.04															
	3	0.0	0.01	0.00	0.0	0.0	0.0	0.0	0.01	0.00	0.0	0.0	0.09															
	4	0.01	0.0	0.00	0.0	0.03	0.00	0.0	0.01	0.39	0.00	0.0	0.02															
	5	0.0	0.0	0.0	0.0	0.10	0.00	0.24	0.01	0.04	0.00	0.17	0.00															
	6	0.0	0.0	0.0	0.01	0.08	0.02	0.00	0.0	0.00	0.00	0.12	0.00															
	7	0.0	0.0	0.71	0.01	0.09	0.18	0.0	0.0	0.0	0.0	0.02	0.38															
	8	0.10	0.00	0.04	0.0	0.22	0.09	0.00	0.0	0.0	0.00	0.12	0.01															
	9	0.16	0.0	0.01	0.00	0.15	0.06	0.00	0.0	0.00	0.21	0.35	0.03															
	10	0.14	0.0	0.0	0.54	0.09	0.07	0.0	0.0	0.00	0.11	0.00	0.01															
	11	0.01	0.00	0.11	0.03	0.01	0.0	0.0	0.0	0.0	0.01	0.35	0.05															
	12	0.10	0.25	0.00	0.0	0.02	0.01	0.0	0.00	0.00	0.00	0.05	0.0															
	13	0.03	0.0	0.00	0.23	0.06	0.02	0.00	0.00	0.0	0.0	0.0	0.0															
	14	0.41	0.0	0.31	0.37	0.0	0.07	0.0	0.0	0.0	0.0	0.0	0.02															
	15	0.01	0.0	0.00	0.01	0.0	0.04	0.0	0.0	0.0	0.0	0.00	0.09															
	16	0.57	0.27	0.21	0.00	0.0	0.00	0.00	0.00	0.0	0.0	0.0	0.20															
	17	0.38	0.23	0.09	0.00	0.0	0.01	0.0	0.0	0.0	0.00	0.00	0.0															
	18	0.42	0.00	0.0	0.01	0.0	0.0	0.0	0.0	0.01	0.02	0.07	0.01															
	19	0.32	0.0	0.0	0.0	0.41	0.03	0.0	0.0	0.38	0.01	0.0	0.00															
	20	0.06	0.0	0.0	0.00	0.06	0.00	0.05	0.0	0.29	0.16	0.0	0.04															
	21	0.63	0.0	0.0	0.0	0.0	0.0	0.00	0.0	0.00	0.02	0.00	0.13															
	22	0.54	0.0	0.0	0.0	0.0	0.17	0.00	0.0	0.00	0.05	0.12	0.02															
	23	0.06	0.0	0.0	0.0	0.27	0.01	0.0	0.0	0.0	0.70	0.64	0.00															
	24	0.25	0.0	0.0	0.02	0.0	0.01	0.0	0.00	0.0	0.01	0.83	0.00															
	25	0.01	0.0	0.0	0.14	0.00	0.01	0.0	0.0	0.0	0.11	0.33	0.01															
	26	0.57	0.0	0.16	0.17	0.04	0.05	0.0	0.0	0.0	0.17	0.04	0.03															
	27	0.53	0.00	0.0	0.03	0.01	0.49	0.00	0.0	0.0	0.0	0.00	0.06															
	28	0.0	0.06	0.05	0.13	0.0	0.62	0.0	0.0	0.0	0.0	0.0	0.05															
	29	0.0	0.20	0.0	0.0	0.0	0.01	0.0	0.00	0.0	0.21	0.15	0.01															
	30	0.0	0.02	0.00	0.00	0.00	0.00	0.13	0.0	0.0	0.18	0.01	0.01															
	31	0.08	0.0	0.0	0.0	0.0	0.0	0.00	0.00	0.0	0.0	0.10	0.01															
	TOTAL	5.38	0.82	2.17	2.10	1.32	1.79	0.31	0.17	1.13	1.58	3.62	1.58															
	STA AV	3.95	1.31	1.18	1.49	1.06	1.82	0.18	1.18	0.67	1.41	2.08	1.75															

NOTES: Values are Thiessen weighted average 'Actual' amounts from 12 recording pairs of gages (shielded and unshielded). 'Actual' amounts were computed as per relationship developed by W. R. Hanson, "Computing Actual Precipitation", Proceedings of WMO-IDE Symposium, Oslo, Norway, August, 1972. The equation used is: $\log_e (U/A) = \log_e (U/S) \times 1.80$, where U = unshielded catchment, S = shielded catchment, and A = actual amount of precipitation. STA AV values are based on 3 yr (1968-70) record period. For temperature information, see table of daily maximum and minimum values included for Watershed 68.001.

1970 DAILY PRECIPITATION (inches) REYNOLDS, IDAHO HACKS CREEK WATERSHED (046084)												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.00	0.00	0.11	0.0	0.00	0.0	0.0	0.01	0.0	0.0	0.0	0.02
2	0.0	0.0	0.02	0.01	0.00	0.00	0.00	0.0	0.0	0.0	0.00	0.03
3	0.0	0.01	0.00	0.0	0.0	0.0	0.0	0.0	0.00	0.0	0.0	0.07
4	0.01	0.0	0.00	0.0	0.0	0.00	0.0	0.01	0.34	0.00	0.0	0.02
5	0.0	0.0	0.0	0.0	0.08	0.00	0.23	0.01	0.04	0.00	0.15	0.00
6	0.0	0.0	0.0	0.00	0.06	0.02	0.0	0.0	0.00	0.00	0.11	0.0
7	0.0	0.0	0.61	0.00	0.00	0.18	0.0	0.0	0.0	0.0	0.02	0.29
8	0.08	0.00	0.04	0.0	0.18	0.09	0.00	0.0	0.0	0.00	0.11	0.01
9	0.12	0.0	0.00	0.00	0.12	0.05	0.00	0.0	0.00	0.18	0.32	0.02
10	0.11	0.0	0.0	0.46	0.07	0.06	0.0	0.0	0.00	0.09	0.00	0.01
11	0.01	0.00	0.08	0.02	0.01	0.0	0.0	0.0	0.0	0.01	0.30	0.03
12	0.08	0.21	0.00	0.0	0.02	0.01	0.0	0.00	0.00	0.00	0.04	0.0
13	0.02	0.0	0.00	0.07	0.05	0.02	0.00	0.00	0.0	0.0	0.0	0.0
14	0.35	0.0	0.24	0.17	0.0	0.06	0.0	0.0	0.0	0.0	0.0	0.01
15	0.01	0.0	0.00	0.00	0.0	0.04	0.0	0.0	0.0	0.0	0.00	0.05
16	0.51	0.22	0.11	0.00	0.0	0.00	0.00	0.00	0.0	0.0	0.0	0.11
17	0.36	0.18	0.06	0.00	0.0	0.01	0.0	0.0	0.0	0.00	0.00	0.0
18	0.39	0.00	0.0	0.00	0.0	0.0	0.0	0.0	0.01	0.01	0.06	0.00
19	0.29	0.0	0.0	0.24	0.03	0.0	0.0	0.0	0.32	0.01	0.0	0.00
20	0.06	0.0	0.0	0.03	0.06	0.00	0.05	0.0	0.24	0.13	0.0	0.02
21	0.55	0.0	0.0	0.0	0.00	0.0	0.00	0.0	0.00	0.02	0.00	0.06
22	0.48	0.0	0.0	0.0	0.15	0.00	0.0	0.0	0.00	0.04	0.10	0.01
23	0.06	0.0	0.0	0.0	0.25	0.01	0.0	0.0	0.0	3.59	0.54	0.0
24	0.23	0.0	0.0	0.01	0.0	0.00	0.0	0.00	0.0	0.01	0.69	0.00
25	0.01	0.0	0.0	0.05	0.00	0.00	0.0	0.0	0.0	0.09	0.28	0.00
26	0.53	0.0	0.06	0.06	0.04	0.03	0.0	0.0	0.0	0.13	0.03	0.01
27	0.50	0.00	0.0	0.01	0.00	0.34	0.00	0.0	0.0	0.0	0.00	0.03
28	0.0	0.03	0.02	0.04	0.0	0.38	0.0	0.0	0.0	0.0	0.0	0.02
29	0.0	0.0	0.07	0.0	0.0	0.01	0.0	0.00	0.0	0.0	0.17	0.07
30	0.0	0.01	0.00	0.00	0.00	0.00	0.00	0.12	0.0	0.0	0.15	0.00
31	0.08	0.0	0.0	0.0	0.0	0.0	0.00	0.0	0.0	0.0	0.0	0.04
TOTAL	4.83	0.65	1.44	1.14	1.12	1.32	0.29	0.17	0.97	1.31	3.08	0.94
STA AV												

NOTES: Values are Thiessen weighted average amounts from 12 unshielded recording gages. STA AV do not apply to unshielded rain gage records.

1970 DAILY PRECIPITATION (inches) REYNOLDS, IDAHO HACKS CREEK WATERSHED (046084)												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.00	0.00	0.16	0.0	0.01	0.0	0.0	0.01	0.0	0.0	0.0	0.02
2	0.0	0.0	0.03	0.01	0.01	0.00	0.00	0.0	0.0	0.0	0.00	0.04
3	0.0	0.01	0.00	0.0	0.0	0.0	0.0	0.0	0.00	0.0	0.0	0.08
4	0.01	0.0	0.00	0.0	0.00	0.00	0.0	0.01	0.36	0.00	0.0	0.02
5	0.0	0.0	0.0	0.0	0.09	0.00	0.23	0.01	0.04	0.00	0.16	0.00
6	0.0	0.0	0.0	0.00	0.07	0.02	0.00	0.0	0.00	0.00	0.11	0.00
7	0.0	0.0	0.67	0.01	0.06	0.18	0.0	0.0	0.0	0.0	0.02	0.33
8	0.09	0.00	0.04	0.0	0.20	0.09	0.00	0.0	0.0	0.00	0.11	0.01
9	0.14	0.0	0.00	0.00	0.13	0.05	0.00	0.0	0.00	0.20	0.34	0.02
10	0.13	0.0	0.0	0.50	0.08	0.07	0.0	0.0	0.00	0.10	0.00	0.01
11	0.01	0.00	0.09	0.02	0.01	0.0	0.0	0.0	0.0	0.01	0.33	0.04
12	0.09	0.23	0.00	0.0	0.02	0.01	0.0	0.00	0.00	0.00	0.05	0.0
13	0.03	0.0	0.00	0.12	0.05	0.02	0.00	0.00	0.0	0.0	0.0	0.0
14	0.38	0.0	0.27	0.25	0.0	0.06	0.0	0.0	0.0	0.0	0.0	0.01
15	0.01	0.0	0.00	0.00	0.0	0.04	0.0	0.0	0.0	0.0	0.00	0.07
16	0.54	0.25	0.15	0.00	0.0	0.00	0.00	0.00	0.0	0.0	0.0	0.15
17	0.37	0.20	0.07	0.00	0.0	0.01	0.0	0.0	0.0	0.00	0.00	0.0
18	0.40	0.00	0.0	0.00	0.0	0.0	0.0	0.0	0.02	0.02	0.06	0.01
19	0.30	0.0	0.0	0.31	0.03	0.0	0.0	0.0	0.35	0.01	0.0	0.00
20	0.06	0.0	0.0	0.00	0.06	0.00	0.05	0.0	0.27	0.15	0.0	0.03
21	0.59	0.0	0.0	0.0	0.00	0.0	0.00	0.0	0.00	0.02	0.00	0.09
22	0.51	0.0	0.0	0.0	0.16	0.00	0.0	0.0	0.00	0.04	0.11	0.02
23	0.06	0.0	0.0	0.0	0.26	0.01	0.0	0.0	0.0	0.65	0.59	0.00
24	0.24	0.0	0.0	0.01	0.0	0.01	0.0	0.00	0.0	0.01	0.77	0.00
25	0.01	0.0	0.0	0.09	0.00	0.01	0.0	0.0	0.0	0.10	0.30	0.00
26	0.55	0.0	0.10	0.10	0.04	0.04	0.0	0.0	0.0	0.16	0.04	0.02
27	0.52	0.00	0.0	0.02	0.00	0.41	0.00	0.0	0.0	0.0	0.00	0.04
28	0.0	0.04	0.03	0.08	0.0	0.47	0.0	0.0	0.0	0.0	0.0	0.03
29	0.0	0.0	0.13	0.0	0.0	0.01	0.0	0.0	0.0	0.0	0.19	0.11
30	0.0	0.0	0.02	0.00	0.00	0.00	0.00	0.13	0.0	0.0	0.16	0.01
31	0.08	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.0	0.0	0.0	0.06
TOTAL	5.12	0.74	1.77	1.53	1.24	1.52	0.30	0.17	1.06	1.46	3.37	1.23
STA AV												

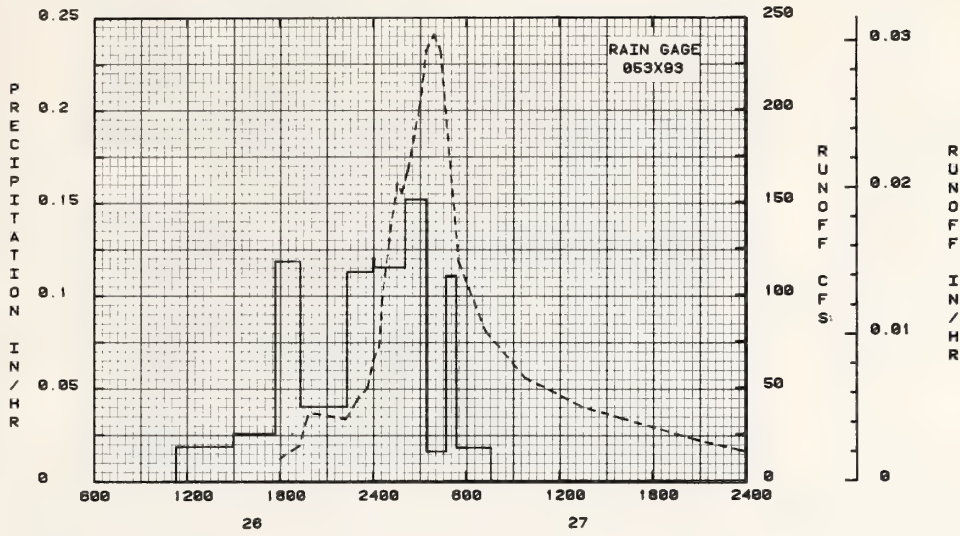
NOTES: Values are Thiessen weighted average amounts from 12 shielded recording gages. STA AV do not apply to shielded rain gage records.

1970 MEAN DAILY DISCHARGE (cfs) REYNOLDS, IDAHO BACKS CREEK WATERSHED (046084)												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.096	4.984	2.254	2.684	2.354	0.501	0.138	0.023	0.011	0.014	0.023	0.858
2	0.092	4.122	2.164	2.389	2.193	0.375	0.138	0.023	0.011	0.017	0.030	0.925
3	0.093	4.340	2.008	2.249	2.321	0.328	0.130	0.020	0.011	0.017	0.038	0.906
4	0.086	3.490	2.030	2.215	2.359	0.266	0.122	0.017	0.011	0.017	0.038	1.196
5	0.088	3.277	1.876	2.152	2.493	0.273	0.114	0.035	0.011	0.014	0.038	1.311
6	0.074	4.135	1.863	1.984	2.611	0.262	0.107	0.057	0.011	0.011	0.038	3.246
7	0.068	3.215	5.562	1.869	2.490	0.270	0.107	0.057	0.011	0.011	0.042	5.627
8	0.071	2.988	9.332	1.896	2.699	0.284	0.107	0.057	0.008	0.011	0.052	8.573
9	0.112	2.728	4.300	1.904	3.218	0.296	0.107	0.052	0.006	0.014	0.075	4.376
10	0.339	2.565	3.764	2.736	3.152	0.325	0.100	0.047	0.006	0.020	0.093	2.542
11	0.238	2.470	3.577	2.280	2.916	0.337	0.093	0.047	0.006	0.023	0.137	2.128
12	0.249	2.973	3.635	2.062	2.292	0.331	0.093	0.047	0.006	0.023	0.149	1.196
13	0.352	2.734	3.768	2.111	2.465	0.418	0.093	0.047	0.006	0.023	0.100	1.305
14	1.306	2.271	5.254	2.343	2.234	0.539	0.086	0.042	0.006	0.023	0.093	1.524
15	1.215	2.153	4.601	2.562	1.937	0.552	0.074	0.038	0.008	0.023	0.105	1.299
16	3.785	2.132	4.290	3.321	1.727	0.457	0.068	0.038	0.014	0.023	0.114	1.637
17	9.729	4.060	4.613	4.570	1.546	0.380	0.068	0.038	0.017	0.023	0.100	1.222
18	15.376	2.743	4.386	3.533	1.615	0.321	0.068	0.038	0.017	0.023	0.126	0.884
19	12.123	2.386	4.531	3.381	1.339	0.250	0.068	0.030	0.017	0.026	0.122	0.588
20	7.805	2.332	4.544	2.694	0.995	0.197	0.068	0.023	0.020	0.026	0.107	0.919
21	19.245	2.239	4.443	2.691	1.026	0.184	0.062	0.017	0.026	0.023	0.100	1.014
22	44.985	2.304	4.071	2.436	0.922	0.184	0.057	0.011	0.030	0.023	0.100	0.840
23	17.699	2.456	4.006	2.461	1.186	0.169	0.051	0.011	0.030	0.023	0.398	0.743
24	17.685	2.297	3.683	2.866	1.039	0.155	0.041	0.011	0.030	0.023	0.965	0.785
25	9.757	2.195	3.423	2.796	0.729	0.138	0.038	0.011	0.024	0.023	4.756	0.861
26	14.777	2.114	3.532	3.190	0.709	0.138	0.038	0.011	0.023	0.017	1.222	0.787
27	72.504	2.055	3.096	2.826	0.566	0.147	0.034	0.011	0.025	0.011	0.700	0.791
28	12.726	2.097	3.183	2.749	0.560	0.150	0.030	0.011	0.021	0.011	0.517	0.791
29	8.476		3.192	3.153	0.621	0.154	0.026	0.011	0.016	0.014	0.600	0.823
30	6.871		3.224	3.171	0.496	0.146	0.023	0.011	0.011	0.017	1.388	0.915
31	5.546		2.865		0.595		0.023	0.011		0.020		1.227
MEAN	9.1486	2.8662	3.7893	2.6425	1.7231	0.2842	0.0766	0.0291	0.0150	0.0190	0.4103	1.6721
INCHES	0.860	0.243	0.356	0.240	0.162	0.026	0.007	0.003	0.001	0.002	0.037	0.157
STA AV	0.526	0.196	0.270	0.286	0.119	0.059	0.009	0.002	0.002	0.002	0.010	0.047

NOTES: To convert CFS to IN/DAY, multiply by 0.003034. STA AV amounts based on 1963-70 record period.

1970			SELECTED RUNOFF EVENT										REYNOLDS, IDAHO BACKS CREEK WATERSHED (046084)									
ANTECEDENT CONDITIONS			RAINFALL							RUNOFF												
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.												
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)												
EVENT OF JANUARY 26 - 27, 1970																						
RG 053X93			RG 053X93																			
1-26	0.0	0.019	1-26	1117	0.0	0.0	1-26	1758	12.075	0.0												
				1501	0.0187	0.07		1916	19.393	0.0026												
				1743	0.0259	0.14		1948	35.467	0.0044												
				1919	0.1187	0.33		2010	36.433	0.0061												
				2219	0.0400	0.45		2214	33.412	0.0152												
WATERSHED CONDITIONS:			2400			0.1129	0.64	2306	45.365	0.0195												
Runoff event was caused by a			1-27	5	0.1201	0.65	2338	50.333	0.0227													
sustained winter rain fol-				205	0.1150	0.88	2400	65.068	0.0254													
lowing about 10 days of inter-				328	0.1518	1.09	1-27	24	72.175	0.0289												
mittent rain and snowmelt.				444	0.0158	1.11		34	95.571	0.0307												
				522	0.1105	1.18		104	130.694	0.0378												
				736	0.0179	1.22		134	160.648	0.0470												
								152	155.140	0.0530												
								214	167.714	0.0605												
								216	167.714	0.0612												
								304	204.522	0.0800												
								326	231.834	0.0901												
								356	240.842	0.1050												
								422	231.834	0.1179												
								532	117.791	0.1437												
								716	80.658	0.1654												
								946	55.650	0.1869												
								1326	39.630	0.2090												
								1626	32.444	0.2227												
								2058	21.506	0.2382												
								2400	15.590	0.2453												

NOTES: To convert CFS to IN/HR, multiply by .00012640.



EVENT OF JANUARY 26 - 27, 1970
REYNOLDS, IDAHO HACKS CREEK WATERSHED (046084)

REYNOLDS, IDAHO TOLLGATE WATERSHED (116083)

LOCATION: Owyhee County, Idaho; 40 miles south of Nampa; main stem of Reynolds Creek which is tributary to the Snake River.

AREA: 13453.00 acres 21.02 sq. miles

MONTHLY PRECIPITATION AND RUNOFF (inches)														REYNOLDS, IDAHO TOLLGATE WATERSHED (116083)															
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual															
1970	P	9.50	1.13	2.85	3.12	1.90	2.28	0.71	0.37	1.00	2.89	6.27	4.36	36.39															
	Q	1.193	0.559	0.657	0.873	4.074	1.764	0.245	0.025	0.030	0.076	0.347	0.448	10.290															
STA AV	P	6.79	2.18	1.60	2.01	1.25	2.02	0.42	1.67	0.59	1.98	3.72	4.00	28.22															
	Q	0.788	0.506	0.589	1.363	3.128	1.507	0.214	0.035	0.022	0.062	0.168	0.209	8.592															
ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																													
		Maximum Discharge		1 Hour		2 Hours		Maximum Volume for Selected Time Interval		6 Hours		12 Hours		1 Day		2 Days		8 Days											
		Date	Rate	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.										
1970		1-27	0.018	1-27	0.017	1-27	0.033	1-27	0.086	1-26	0.145	1-26	0.211	5-17	0.380	5-17	1.436												
MAXIMUMS FOR PERIOD OF RECORD																													
		1-21	0.030	1-21	0.029	1-21	0.057	1-21	0.157	1-21	0.283	1-20	0.454	1-20	0.612	5-17	1.523												
		1969		1969		1969		1969		1969		1969		1969		1969													

NOTES: Watershed condition - Watershed is generally sagebrush rangeland except for scattered stands of Douglas fir and aspen and mountain meadows. The topography is steep with numerous rock outcrops on the ridges. The watershed is used mainly for cattle grazing except during the winter when snow blankets most of the area. Vegetation consists predominately of big sagebrush, little sagebrush, rabbitbrush, snowberry, blue bunch wheatgrass, Idaho fescue, and squirreltail grass. 25% of the area has a vegetative cover of 0-25%, 15% of the area has a vegetative cover of 26-50%, 15% of the area has a vegetative cover of 51-75%, and 45% of the area has a vegetative cover of 76-100%. For map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1967, USDA Misc. Pub. 1262, p. 68.4-6. Records began: Precipitation - 1963; Runoff - 1967. Precipitation: Thiessen weighted average 'Computed Actual' amounts from 16 rain gages. Station average precipitation amounts are based on 1968-70 record period. Station average runoff amounts are based on 1967-70 record period. For long-time precipitation records, see National Weather Service records at Boise, Idaho; 50 miles N.E. of watershed.

SNOW COURSE DATA: DATE OF MEASUREMENT/AVERAGE WATER CONTENT (INCHES)																										
Course#	Date	Inches	Date	Inches	Date	Inches	Date	Inches	Date	Inches	Date	Inches	Date	Inches	Date	Inches	Date	Inches	Date	Inches	Date	Inches	Date	Inches	Date	Inches
144062	010270	3.00	011470	5.44	012270	8.02	012870	9.58	021070	10.25	022570	11.00	022570	11.00	022570	11.00	022570	11.00	022570	11.00	022570	11.00	022570	11.00	022570	11.00
144062	031070	12.25	032470	12.60	040770	10.80	042170	8.80	050470	7.80	051970	7.80	051970	7.80	051970	7.80	051970	7.80	051970	7.80	051970	7.80	051970	7.80	051970	7.80
144062	121670	5.70	123070	7.90																						
155054	010270	2.65	011570	4.75	012270	7.11	012870	8.45	021070	8.25	022570	9.40	022570	9.40	022570	9.40	022570	9.40	022570	9.40	022570	9.40	022570	9.40	022570	9.40
155054	031070	10.00	032470	10.60	040770	9.20	042170	7.80	050470	7.80	051970	7.80	051970	7.80	051970	7.80	051970	7.80	051970	7.80	051970	7.80	051970	7.80	051970	7.80
155054	123070	7.00																								
163020	010270	9.64	011570	13.50	012270	21.70	021070	22.82	022570	24.58	031070	26.40	031070	26.40	031070	26.40	031070	26.40	031070	26.40	031070	26.40	031070	26.40	031070	26.40
163020	032470	28.20	040770	28.00	042170	32.20	050570	31.50	051970	27.00	060270	13.30	060270	13.30	060270	13.30	060270	13.30	060270	13.30	060270	13.30	060270	13.30	060270	13.30
163020	120470	8.90	121670	14.50	123070	13.80																				
163098	010270	8.10	011570	14.17	012270	22.60	021070	23.00	022570	23.50	031070	26.04	031070	26.04	031070	26.04	031070	26.04	031070	26.04	031070	26.04	031070	26.04	031070	26.04
163098	032470	28.40	040770	28.30	042170	31.20	050570	30.00	051970	23.50	060270	6.70	060270	6.70	060270	6.70	060270	6.70	060270	6.70	060270	6.70	060270	6.70	060270	6.70
163098	120270	7.20	121670	12.00	123070	14.44																				
167007	010270	2.90	011570	5.25	012270	10.60	021070	10.40	022570	11.40	031070	12.40	031070	12.40	031070	12.40	031070	12.40	031070	12.40	031070	12.40	031070	12.40	031070	12.40
167007	032470	12.20	040770	12.60	042170	13.20	050570	11.00	051970	7.70	060270	6.40	060270	6.40	060270	6.40	060270	6.40	060270	6.40	060270	6.40	060270	6.40	060270	6.40
167007	123070	7.80																								
174026	010270	6.98	011570	10.80	012270	16.20	021070	21.00	022570	23.25	031070	23.00	031070	23.00	031070	23.00	031070	23.00	031070	23.00	031070	23.00	031070	23.00	031070	23.00
174026	031070	25.60	032470	27.25	040770	28.00	042170	32.30	050570	29.50	051970	23.50	051970	23.50	051970	23.50	051970	23.50	051970	23.50	051970	23.50	051970	23.50	051970	23.50
174026	060270	6.30	120270	6.20	121670	11.20																				

NOTES: For snow course location information, see map on p. 68.001-6 of Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1968, USDA Misc. Pub. 1330.

1970 DAILY PRECIPITATION (inches) REYNOLDS, IDAHO TOLLGATE WATERSHED (116083)												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.00	0.01	0.24	0.02	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.04
2	0.00	0.01	0.12	0.00	0.0	0.0	0.0	0.0	0.00	0.0	0.0	0.26
3	0.0	0.02	0.00	0.0	0.0	0.0	0.0	0.0	0.00	0.0	0.00	0.53
4	0.01	0.00	0.0	0.0	0.00	0.0	0.00	0.0	0.30	0.0	0.05	0.07
5	0.01	0.0	0.0	0.0	0.01	0.00	0.52	0.16	0.08	0.00	0.48	0.00
6	0.00	0.0	0.00	0.01	0.12	0.02	0.02	0.00	0.01	0.01	0.15	0.00
7	0.01	0.0	0.67	0.0	0.0	0.02	0.0	0.0	0.00	0.00	0.10	0.57
8	0.20	0.0	0.20	0.0	0.42	0.39	0.06	0.00	0.00	0.00	0.29	0.23
9	0.23	0.0	0.00	0.0	0.25	0.10	0.04	0.0	0.0	0.42	0.68	0.09
10	0.30	0.0	0.00	0.63	0.26	0.19	0.00	0.00	0.0	0.13	0.01	0.02
11	0.06	0.00	0.14	0.05	0.03	0.0	0.0	0.0	0.0	0.31	0.70	0.05
12	0.39	0.21	0.00	0.00	0.10	0.00	0.00	0.0	0.0	0.02	0.05	0.01
13	0.18	0.02	0.00	0.64	0.67	0.10	0.00	0.0	0.0	0.00	0.00	0.01
14	0.50	0.00	0.32	0.65	0.00	0.06	0.0	0.0	0.0	0.00	0.00	0.13
15	0.10	0.0	0.00	0.01	0.00	0.10	0.0	0.0	0.0	0.0	0.00	0.11
16	0.98	0.30	0.42	0.0	0.00	0.0	0.00	0.0	0.0	0.00	0.0	0.16
17	0.61	0.38	0.07	0.00	0.0	0.05	0.0	0.0	0.0	0.00	0.0	0.01
18	0.59	0.04	0.00	0.01	0.0	0.00	0.0	0.0	0.01	0.00	0.15	0.02
19	0.50	0.0	0.0	0.49	0.00	0.0	0.0	0.00	0.50	0.02	0.00	0.00
20	0.08	0.0	0.0	0.00	0.17	0.00	0.05	0.0	0.10	0.23	0.00	0.30
21	1.13	0.0	0.0	0.0	0.01	0.30	0.0	0.0	0.0	0.14	0.00	0.16
22	0.74	0.0	0.0	0.0	0.08	0.00	0.00	0.0	0.0	0.11	0.18	0.05
23	0.21	0.0	0.00	0.0	0.29	0.08	0.0	0.00	0.0	1.22	0.79	0.01
24	0.39	0.0	0.0	0.05	0.00	0.0	0.0	0.0	0.0	0.04	1.11	0.00
25	0.09	0.0	0.0	0.10	0.0	0.0	0.0	0.0	0.0	0.17	0.30	0.01
26	1.07	0.0	0.14	0.31	0.06	0.03	0.01	0.00	0.0	0.30	0.13	0.05
27	0.89	0.0	0.0	0.04	0.00	0.45	0.0	0.0	0.0	0.00	0.03	0.11
28	0.00	0.12	0.06	0.08	0.00	0.58	0.01	0.0	0.0	0.0	0.0	0.73
29	0.0	0.0	0.22	0.02	0.00	0.10	0.0	0.02	0.0	0.0	0.36	0.35
30	0.0	0.0	0.20	0.01	0.00	0.0	0.0	0.16	0.0	0.0	0.49	0.11
31	0.21	0.0	0.0	0.0	0.0	0.0	0.0	0.02	0.0	0.00	0.0	0.14
TOTAL	9.50	1.13	2.85	3.12	1.90	2.28	0.71	0.37	1.00	2.89	6.27	4.36
STA AV	6.79	2.18	1.60	2.01	1.25	2.02	0.42	1.67	0.59	1.98	3.72	4.00

NOTES: Values are Thiessen weighted average 'Actual' amounts from 15 recording pairs of gages (shielded and unshielded). 'Actual' amounts were computed as per relationship developed by W. R. Basor, "Computing Actual Precipitation", Proceedings of WMO-IDHS Symposium, Geilo, Norway, August, 1972. The equation used is: $\log_e (U/A) = \log_e (U/S) \times 1.80$, where U = unshielded catchment, S = shielded catchment, and A = actual amount of precipitation. STA AV values are based on 3 yr (1968-70) record period. For temperature information, see table of daily maximum and minimum values included for Watersheds 68.001 and 68.014.

1970 DAILY PRECIPITATION (inches) REYNOLDS, IDAHO TOLLGATE WATERSHED (116083)												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.00	0.01	0.13	0.00	0.0	0.0	0.0	0.0	0.00	0.0	0.0	0.03
2	0.00	0.01	0.07	0.0	0.0	0.0	0.0	0.0	0.00	0.0	0.0	0.22
3	0.0	0.01	0.00	0.0	0.0	0.0	0.0	0.0	0.00	0.0	0.00	0.39
4	0.01	0.0	0.0	0.0	0.00	0.0	0.00	0.0	0.25	0.0	0.04	0.04
5	0.01	0.0	0.0	0.0	0.01	0.00	0.45	0.16	0.06	0.00	0.37	0.00
6	0.00	0.0	0.00	0.00	0.09	0.02	0.01	0.00	0.00	0.01	0.12	0.00
7	0.01	0.0	0.46	0.0	0.0	0.02	0.0	0.0	0.00	0.00	0.08	0.38
8	0.11	0.0	0.12	0.0	0.33	0.35	0.05	0.00	0.00	0.00	0.22	0.12
9	0.15	0.0	0.00	0.0	0.20	0.09	0.04	0.0	0.0	0.29	0.66	0.04
10	0.18	0.0	0.00	0.37	0.21	0.17	0.00	0.00	0.0	0.10	0.00	0.01
11	0.03	0.00	0.08	0.03	0.02	0.0	0.0	0.0	0.0	0.00	0.51	0.03
12	0.23	0.17	0.00	0.0	0.07	0.00	0.00	0.0	0.0	0.02	0.03	0.01
13	0.11	0.01	0.00	0.31	0.05	0.09	0.00	0.0	0.0	0.00	0.00	0.00
14	0.33	0.00	0.20	0.33	0.00	0.06	0.0	0.0	0.0	0.0	0.00	0.07
15	0.07	0.0	0.00	0.01	0.00	0.09	0.0	0.0	0.0	0.0	0.00	0.06
16	0.62	0.23	0.28	0.0	0.00	0.0	0.00	0.0	0.0	0.00	0.0	0.07
17	0.39	0.28	0.05	0.00	0.0	0.05	0.0	0.0	0.0	0.00	0.0	0.01
18	0.39	0.03	0.00	0.01	0.0	0.0	0.0	0.0	0.01	0.00	0.11	0.01
19	0.38	0.0	0.0	0.25	0.00	0.0	0.0	0.00	0.45	0.01	0.00	0.00
20	0.07	0.0	0.0	0.00	0.15	0.00	0.05	0.0	0.09	0.21	0.00	0.16
21	0.87	0.0	0.0	0.0	0.01	0.00	0.3	0.0	0.0	0.09	0.00	0.08
22	0.60	0.0	0.0	0.0	0.08	0.00	0.00	0.0	0.0	0.07	0.14	0.02
23	0.15	0.0	0.00	0.0	0.25	0.07	0.0	0.00	0.0	0.86	0.63	0.00
24	0.27	0.0	0.0	0.02	0.00	0.0	0.0	0.0	0.0	0.03	0.92	0.00
25	0.06	0.0	0.0	0.04	0.0	0.0	0.0	0.0	0.0	0.11	0.24	0.00
26	0.82	0.0	0.06	0.13	0.05	0.02	0.01	0.00	0.0	0.19	0.10	0.02
27	0.66	0.0	0.0	0.02	0.00	0.41	0.0	0.0	0.0	0.00	0.03	0.04
28	0.00	0.07	0.03	0.05	0.0	0.53	0.01	0.0	0.0	0.0	0.0	0.34
29	0.0	0.10	0.01	0.00	0.00	0.10	0.0	0.02	0.0	0.0	0.30	0.15
30	0.0	0.09	0.00	0.00	0.00	0.0	0.0	0.14	0.0	0.0	0.39	0.05
31	0.12	0.0	0.0	0.0	0.0	0.0	0.0	0.02	0.0	0.00	0.0	0.07
TOTAL	6.65	0.82	1.69	1.59	1.54	2.08	0.63	0.34	0.86	2.02	4.90	2.44
STA AV												

NOTES: Values are Thiessen weighted average amounts from 16 unshielded recording gages. STA AV do not apply to unshielded rain gage records.

1970 DAILY PRECIPITATION (inches) REYNOLDS, IDAHO TOLLGATE WATERSHED (116083)												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.00	0.01	0.19	0.01	9.0	0.00	0.0	0.0	0.00	0.0	0.0	0.04
2	0.00	0.01	0.09	0.00	0.0	0.0	0.0	0.0	0.00	0.0	0.0	0.24
3	0.0	0.02	0.00	0.0	0.0	0.0	0.0	0.0	0.00	0.0	0.00	0.46
4	0.01	0.00	0.0	0.0	0.00	0.0	0.00	0.0	0.27	0.0	0.05	0.05
5	0.01	0.0	0.0	0.0	0.01	0.00	0.48	0.16	0.07	0.00	0.42	0.00
6	0.00	0.0	0.00	0.00	0.11	0.02	0.01	0.00	0.01	0.01	0.14	0.00
7	0.01	0.0	0.56	0.0	0.0	0.02	0.0	0.0	0.00	0.00	0.09	0.47
8	0.15	0.0	0.16	0.0	0.38	0.37	0.06	0.00	0.00	0.00	0.26	0.17
9	0.19	0.0	0.00	0.0	0.23	0.10	0.04	0.0	0.0	0.36	0.77	0.06
10	0.23	0.0	0.00	0.49	0.24	0.18	0.00	0.00	0.0	0.11	0.01	0.02
11	0.04	0.00	0.11	0.04	0.02	0.0	0.0	0.0	0.0	0.01	0.61	0.04
12	0.30	0.19	0.00	0.00	0.09	0.00	0.00	0.0	0.0	0.02	0.04	0.01
13	0.14	0.01	0.00	0.46	0.06	0.10	0.00	0.0	0.0	0.00	0.00	0.01
14	0.41	0.00	0.26	0.48	0.00	0.06	0.0	0.0	0.0	0.00	0.00	0.10
15	0.08	0.0	0.00	0.01	0.00	0.09	0.0	0.0	0.0	0.0	0.00	0.09
16	0.79	0.27	0.35	0.0	0.00	0.0	0.00	0.0	0.0	0.00	0.0	0.12
17	0.49	0.33	0.07	0.00	0.0	0.05	0.0	0.0	0.0	0.00	0.0	0.41
18	0.48	0.04	0.00	0.01	0.0	0.00	0.0	0.0	0.01	0.00	0.13	0.01
19	0.44	0.0	0.0	0.36	0.00	0.0	0.0	0.00	0.47	0.02	0.00	0.00
20	0.07	0.0	0.0	0.00	0.16	0.00	0.05	0.0	0.09	0.25	0.00	0.23
21	1.01	0.0	0.0	0.0	0.01	0.00	0.0	0.0	0.0	0.11	0.00	0.13
22	0.67	0.0	0.0	0.0	0.08	0.00	0.00	0.0	0.0	0.10	0.16	0.04
23	0.18	0.0	0.00	0.0	0.27	0.07	0.0	0.00	0.0	1.04	0.71	0.01
24	0.33	0.0	0.0	0.03	0.00	0.0	0.0	0.0	0.0	0.04	1.02	0.00
25	0.08	0.0	0.0	0.07	0.0	0.0	0.0	0.0	0.0	0.14	0.27	0.00
26	0.96	0.0	0.09	0.21	0.06	0.02	0.01	0.00	0.0	0.25	0.12	0.04
27	0.78	0.0	0.0	0.02	0.00	0.44	0.0	0.0	0.0	0.00	0.03	0.08
28	0.00	0.09	0.04	0.06	0.00	0.56	0.01	0.0	0.0	0.0	0.0	0.52
29	0.0	0.0	0.15	0.01	0.00	0.10	0.0	0.02	0.0	0.0	0.33	0.25
30	0.0	0.0	0.14	0.01	0.00	0.0	0.0	0.15	0.0	0.0	0.44	0.08
31	1.16	0.0	0.0	0.0	0.0	0.0	0.0	0.12	0.00	0.00	0.11	0.11
TOTAL	8.03	0.97	2.24	2.30	1.73	2.20	0.67	0.36	0.94	2.46	5.62	3.38
STA AV												

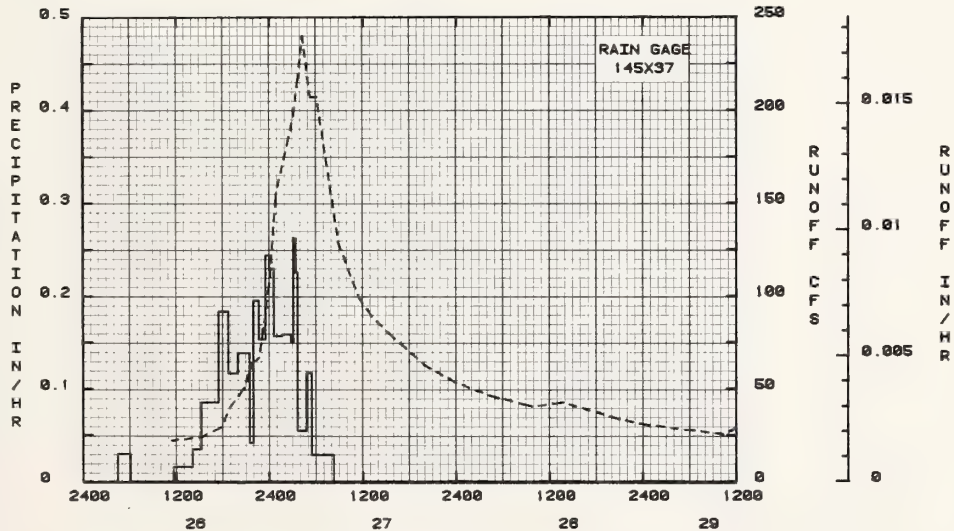
NOTES: Values are Thiessen weighted average amounts from 16 shielded recording gages. STA AV do not apply to shielded rain gage records.

1970 MEAN DAILY DISCHARGE (cfs) REYNOLDS, IDAHO TOLLGATE WATERSHED (116083)												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	1.25	16.36	9.80	9.40	17.64	67.23	10.88	1.29	0.10	0.55	1.80	8.95
2	1.20	14.08	9.14	9.31	26.69	66.83	9.46	1.17	0.07	0.58	1.65	8.22
3	1.35	12.70	8.24	8.82	39.23	65.09	8.63	1.21	0.07	0.71	1.49	7.80
4	1.26	11.14	8.06	9.42	53.23	62.53	7.91	0.93	0.48	0.78	1.50	7.44
5	1.33	10.24	7.54	12.57	63.01	59.36	9.27	1.00	0.73	0.82	2.56	7.22
6	0.93	10.29	7.59	18.62	68.49	55.17	8.78	1.14	0.66	0.95	2.86	9.68
7	0.83	10.28	15.76	17.02	68.69	52.50	6.92	0.72	0.51	0.99	2.51	27.23
8	1.13	10.45	23.15	15.48	73.16	50.63	6.37	0.72	0.43	1.06	2.28	26.28
9	1.59	10.96	13.15	18.35	81.65	53.42	5.94	0.59	0.48	1.49	6.78	16.64
10	1.90	11.50	11.56	32.89	72.37	46.48	5.69	0.64	0.48	1.63	5.23	11.46
11	1.69	11.97	10.81	27.17	58.16	37.74	5.22	0.52	0.38	1.31	5.78	10.14
12	1.90	15.17	10.23	20.55	50.36	33.66	4.70	0.38	0.46	1.19	5.23	8.37
13	2.49	14.22	11.20	18.18	44.10	30.82	4.43	0.27	0.64	1.19	3.42	8.60
14	3.80	11.58	15.62	17.51	40.18	29.10	4.17	0.28	0.71	1.16	2.71	7.72
15	3.22	10.53	14.19	16.58	47.21	27.07	3.77	0.28	0.78	1.14	2.82	7.20
16	6.40	10.48	14.91	16.48	67.70	23.24	3.55	0.28	0.68	1.14	2.73	6.86
17	14.66	19.01	15.24	18.12	92.41	22.65	3.29	0.27	0.38	1.14	2.53	6.17
18	16.70	12.21	13.03	18.79	108.65	20.59	3.06	0.23	0.28	1.16	2.56	5.76
19	17.52	10.61	12.49	19.25	106.34	20.44	2.75	0.24	0.75	1.19	2.45	5.53
20	12.59	10.42	12.44	16.65	95.16	17.77	2.56	0.22	0.86	1.39	2.29	5.21
21	64.04	9.94	12.48	15.49	98.58	16.51	2.64	0.23	0.77	1.58	1.99	4.87
22	95.62	9.66	12.02	15.37	98.38	15.37	2.39	0.17	0.73	1.71	1.71	4.61
23	78.28	9.32	12.37	15.78	107.28	15.15	2.28	0.13	0.69	3.49	7.49	4.68
24	56.79	8.77	13.12	16.03	103.68	14.02	2.07	0.11	0.73	2.90	36.75	4.55
25	29.29	8.39	12.51	15.54	100.37	13.22	1.90	0.10	0.73	2.02	35.68	4.81
26	32.42	8.44	12.40	16.34	106.30	12.52	1.77	0.10	0.71	1.88	13.10	4.90
27	117.56	8.40	11.13	14.59	98.05	15.67	1.73	0.10	0.69	1.32	9.51	4.70
28	41.09	8.69	11.07	13.88	88.22	21.95	1.71	0.10	0.64	1.51	8.08	4.59
29	27.43	10.48	14.35	81.69	17.33	1.61	1.61	0.10	0.58	1.64	9.50	4.76
30	21.02	10.44	14.82	76.06	12.85	1.53	1.53	0.18	0.55	1.61	11.14	4.19
31	16.90	9.40		69.75		1.45	1.45	0.26		1.80		4.06
MEAN	21.747	11.279	11.987	16.444	74.281	33.229	4.465	0.451	0.559	1.389	6.538	8.168
INCHES	1.193	0.559	0.657	0.873	4.074	1.764	0.245	0.025	0.030	0.076	0.347	0.448
STA AV	0.788	0.506	0.589	1.363	3.128	1.507	0.214	0.035	0.022	0.062	0.168	0.209

NOTES: To convert CFS to IN/DAY, multiply by 0.001769. STA AV amounts based on 1967-70 record period.

1970 SELECTED RUNOFF EVENT			REYNOLDS, IDAHO TOLLGATE WATERSHED (116083)							
ANTECEDENT CONDITIONS			RAINFALL				RUNOFF			
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)
EVENT OF JANUARY 26 - 29, 1970										
RG 145X37			RG 145X37							
1-26	0.0	0.019	1-26	424	0.0	0.0	1-26	1120	22.371	0.0
				604	0.0300	0.05		1506	23.892	0.0064
				1138	0.0	0.05		1746	29.362	0.0116
				1405	0.0163	0.09		1856	40.335	0.0146
				1513	0.0353	0.13		2020	48.194	0.0192
WATERSHED CONDITIONS: Runoff event was caused by a sustained winter rain following about 10 days of intermittent rain and snowmelt.				1726	0.0857	0.32		2046	50.614	0.0208
				1841	0.1840	0.55		2144	63.931	0.0249
				1958	0.1169	0.70		2240	66.848	0.0294
				2129	0.1385	0.91		2314	82.767	0.0325
				2158	0.0414	0.93		2400	106.993	0.0379
				2241	0.1954	1.07	1-27	52	155.404	0.0463
				2328	0.1532	1.19		230	185.760	0.0668
				2400	0.2437	1.32		306	197.709	0.0753
			1-27	34	0.2294	1.45		344	219.833	0.0850
				139	0.1569	1.62		414	240.062	0.0935
				247	0.1588	1.80		514	207.000	0.1100
				307	0.1500	1.85		604	207.000	0.1227
				323	0.2623	1.92		852	128.549	0.1573
				339	0.2251	1.98		1128	99.095	0.1791
				445	0.0545	2.04		1308	88.685	0.1906
				526	0.1171	2.12		1526	79.401	0.2049
				814	0.0286	2.20		1738	71.387	0.2171
								1956	62.505	0.2284
								2400	53.113	0.2457
							1-28	436	45.853	0.2625
								944	40.335	0.2788
								1344	42.486	0.2910
								2100	33.381	0.3113
								2400	30.663	0.3184
							1-29	638	27.274	0.3326
								1016	25.426	0.3397

NOTES: To convert CFS to IN/HR, multiply by 0.00007372.



EVENT OF JANUARY 26 - 29, 1970
REYNOLDS, IDAHO TOLLGATE WATERSHED (116083)

REYNOLDS, IDAHO MURPHY CREEK WATERSHED (043004)

LOCATION: Owyhee County, Idaho; 35 miles south of Nampa, Idaho; an east-flowing tributary to Reynolds Creek, tributary to the Snake River.

AREA: 306.00 acres

MONTHLY PRECIPITATION AND RUNOFF (inches)														REYNOLDS, IDAHO MURPHY CREEK WATERSHED (043004)													
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual													
1970	P	6.74	0.91	2.73	2.22	1.86	3.23	0.36	0.05	1.39	1.78	4.14	2.00	27.41													
	Q	2.555	0.770	0.866	0.997	0.924	0.219	0.059	0.003	0.003	0.022	0.618	7.258														
STA AV	P	4.71	1.60	1.54	1.85	1.43	2.84	0.22	1.06	0.68	1.93	2.45	2.20	22.50													
	Q	1.607	0.716	0.760	1.213	0.779	0.258	0.050	0.002	0.001	0.010	0.107	0.254	5.757													
ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																											
		Maximum Discharge		1 Hour		2 Hours		Maximum Volume for Selected Time Interval																			
		Date	Rate	Date	Vol.	Date	Vol.	Date	6 Hours Vol.	Date	12 Hours Vol.	Date	1 Day Vol.	Date	2 Days Vol.	Date	8 Days Vol.										
1970		1-27	0.060	1-27	0.050	1-27	0.094	1-27	0.216	1-27	0.303	1-26	0.400	1-26	0.535	1-19	1.578										
MAXIMUMS FOR PERIOD OF RECORD																											
		1-27	0.060	1-21	0.050	1-20	0.096	1-20	0.261	1-20	0.445	1-20	0.720	1-20	1.050	1-19	1.734										
		1970		1969		1969		1969		1969		1969		1969		1969											

NOTES: Watershed conditions: Watershed is sagebrush rangeland used almost exclusively for cattle grazing. Willows are common along watercourses and in seep areas. Vegetation consists largely of big sagebrush, bitterbrush, Idaho fescue, Sandberg bluegrass, bluebunch wheatgrass, squirreltail grass, and snowberry. 10% of the area has a vegetative cover of 0-25%, 35% of the area has a vegetative cover of 26-50%, 20% of the area has a vegetative cover of 51-75%, and 35% of the area has a vegetative cover of 76-100%. For map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1967, USDA Misc. Pub. 1262, p. 68.11-6. Records started: Precipitation - 1963; Runoff - 1967. Precipitation: Thiessen weighted average 'Computed Actual' amounts from 3 rain gages. Station average precipitation amounts based on 1968-70 record period. Station average runoff amounts based on 1967-70 record period. For long-time precipitation records, see National Weather Service records at Boise, Idaho, 50 miles N.E. of watershed.

1970 DAILY PRECIPITATION (inches)													REYNOLDS, IDAHO MURPHY CREEK WATERSHED (043004)												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec													
1	0.01	0.0	0.22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.05													
2	0.0	0.0	0.02	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.07													
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.10													
4	0.01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.43	0.0	0.0	0.07													
5	0.0	0.0	0.0	0.0	0.0	0.09	0.01	0.30	0.0	0.10	0.01	0.16													
6	0.0	0.0	0.0	0.0	0.08	0.05	0.0	0.0	0.01	0.02	0.12	0.01													
7	0.0	0.0	0.06	0.0	0.01	0.31	0.0	0.0	0.0	0.0	0.05	0.40													
8	0.14	0.0	0.06	0.0	0.31	0.08	0.01	0.0	0.0	0.01	0.26	0.09													
9	0.21	0.0	0.0	0.01	0.23	0.09	0.0	0.0	0.00	0.22	0.52	0.04													
10	0.22	0.0	0.0	0.82	0.10	0.08	0.0	0.0	0.0	0.14	0.0	0.00													
11	0.05	0.0	0.15	0.05	0.01	0.0	0.0	0.0	0.0	0.0	0.37	0.05													
12	0.16	0.29	0.03	0.0	0.03	0.02	0.0	0.0	0.0	0.0	0.05	0.0													
13	0.04	0.0	0.01	0.11	0.12	0.04	0.0	0.01	0.0	0.0	0.0	0.0													
14	0.57	0.0	0.28	0.30	0.0	0.02	0.0	0.0	0.0	0.0	0.0	0.01													
15	0.02	0.0	0.01	0.0	0.0	0.04	0.0	0.0	0.0	0.0	0.0	0.09													
16	0.60	0.34	0.29	0.01	0.0	0.00	0.0	0.0	0.0	0.0	0.0	0.32													
17	0.42	0.17	0.11	0.00	0.0	0.06	0.0	0.0	0.0	0.01	0.0	0.0													
18	0.63	0.01	0.0	0.0	0.0	0.0	0.0	0.0	0.01	0.01	0.10	0.00													
19	0.62	0.0	0.0	0.40	0.23	0.0	0.0	0.0	0.46	0.02	0.0	0.00													
20	0.05	0.0	0.0	0.0	0.11	0.0	0.06	0.0	0.37	0.22	0.0	0.06													
21	0.69	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.01	0.03	0.0	0.13													
22	0.55	0.0	0.0	0.0	0.10	0.0	0.0	0.0	0.0	0.07	0.14	0.03													
23	0.07	0.0	0.0	0.0	0.36	0.01	0.0	0.0	0.0	0.83	0.81	0.03													
24	0.28	0.0	0.0	0.07	0.0	0.0	0.0	0.0	0.0	0.01	0.59	0.00													
25	0.0	0.0	0.0	0.08	0.0	0.02	0.0	0.0	0.0	0.10	0.38	0.00													
26	0.62	0.0	0.13	0.17	0.07	0.08	0.0	0.0	0.0	0.10	0.03	0.01													
27	0.70	0.0	0.0	0.01	0.0	0.80	0.0	0.0	0.0	0.0	0.01	0.05													
28	0.0	0.10	0.09	0.20	0.0	1.49	0.0	0.0	0.0	0.0	0.0	0.16													
29	0.0	0.0	0.31	0.0	0.0	0.03	0.0	0.00	0.00	0.0	0.25	0.18													
30	0.0	0.07	0.0	0.0	0.0	0.0	0.0	0.03	0.0	0.0	0.31	0.02													
31	0.07	0.0	0.0	0.0	0.0	0.0	0.0	0.02	0.0	0.0	0.0	0.08													
TOTAL	6.74	0.91	2.73	2.22	1.86	3.23	0.36	0.05	1.39	1.78	4.14	2.00													
STA AV	4.71	1.60	1.54	1.85	1.43	2.84	0.22	1.06	0.68	1.93	2.45	2.20													

NOTES: Values are Thiessen weighted average 'Actual' amounts from 3 recording pairs of gages (shielded and unshielded). 'Actual' amounts were computed as per relationship developed by W. R. Hamon, "Computing Actual Precipitation", Proceedings of WHO-IDHS Symposium, Gello, Norway, August, 1972. The equation used is: $\log_e (U/A) = \log_e (U/S) \times 1.80$, where U = unshielded catchment, S = shielded catchment, and A = actual amount of precipitation. STA AV values are based on 3 yr (1968-70) record period. For temperature information, see table of daily maximum and minimum values included for Watersheds 68.001 and 68.014.

1970	DAILY PRECIPITATION (inches)					REYNOLDS, IDAHO MURPHY CREEK WATERSHED (043004)							
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
1	0.01	0.0	0.12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.03	
2	0.0	0.0	0.01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.04	
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.08	
4	0.01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.38	0.0	0.0	0.04	
5	0.0	0.0	0.0	0.0	0.09	0.01	0.30	0.0	0.09	0.01	0.15	0.02	
6	0.0	0.0	0.0	0.0	0.08	0.05	0.0	0.0	0.01	0.01	0.11	0.0	
7	0.0	0.0	0.66	0.0	0.01	0.31	0.0	0.0	0.0	0.0	0.04	0.35	
8	0.09	0.0	0.04	0.0	0.31	0.08	0.01	0.0	0.0	0.01	0.24	0.04	
9	0.14	0.0	0.0	0.00	0.22	0.09	0.0	0.0	0.00	0.19	0.47	0.03	
10	0.14	0.0	0.0	0.55	0.09	0.08	0.0	0.0	0.0	0.12	0.0	0.00	
11	0.03	0.0	0.11	0.04	0.01	0.0	0.0	0.0	0.0	0.0	0.30	0.04	
12	0.12	0.23	0.01	0.0	0.03	0.02	0.0	0.0	0.0	0.0	0.03	0.0	
13	0.03	0.0	0.00	0.07	0.10	0.04	0.0	0.01	0.0	0.0	0.0	0.0	
14	0.47	0.0	0.19	0.19	0.0	0.02	0.0	0.0	0.0	0.0	0.0	0.00	
15	0.02	0.0	0.01	0.0	0.0	0.04	0.0	0.0	0.0	0.0	0.0	0.05	
16	0.53	0.26	0.14	0.01	0.0	0.00	0.0	0.0	0.0	0.0	0.0	0.15	
17	0.41	0.13	0.05	0.00	0.0	0.04	0.0	0.0	0.0	0.01	0.0	0.0	
18	0.58	0.00	0.0	0.0	0.0	0.0	0.0	0.0	0.01	0.00	0.07	0.00	
19	0.55	0.0	0.0	0.25	0.15	0.0	0.0	0.0	0.40	0.02	0.0	0.06	
20	0.05	0.0	0.0	0.0	0.08	0.0	0.06	0.0	0.31	0.18	0.0	0.03	
21	0.66	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.01	0.02	0.0	0.08	
22	0.54	0.0	0.0	0.0	0.07	0.0	0.0	0.0	0.0	0.04	0.09	0.02	
23	0.06	0.0	0.0	0.0	0.31	0.0	0.0	0.0	0.0	0.67	0.59	0.0	
24	0.25	0.0	0.0	0.02	0.0	0.0	0.0	0.0	0.0	0.0	0.47	0.00	
25	0.0	0.0	0.0	0.03	0.0	0.0	0.0	0.0	0.0	0.07	0.30	0.00	
26	0.58	0.0	0.04	0.06	0.07	0.02	0.0	0.0	0.0	0.08	0.02	0.01	
27	0.64	0.0	0.0	0.00	0.0	0.22	0.0	0.0	0.0	0.0	0.00	0.03	
28	0.0	0.05	0.03	0.07	0.0	0.33	0.0	0.0	0.0	0.0	0.0	0.05	
29	0.0	0.10	0.0	0.0	0.0	0.01	0.0	0.00	0.0	0.0	0.19	0.11	
30	0.0	0.02	0.0	0.0	0.0	0.0	0.0	0.03	0.0	0.0	0.25	0.02	
31	0.07	0.0	0.0	0.0	0.0	0.0	0.0	0.02	0.0	0.0	0.0	0.06	
TOTAL	5.97	0.67	1.56	1.29	1.60	1.36	0.36	0.05	1.21	1.44	3.32	1.27	
STA AV													

NOTES: Values are Thiessen weighted average amounts from 3 unshielded recording gages. STA AV do not apply to unshielded rain gage records.

1970	DAILY PRECIPITATION (inches)					REYNOLDS, IDAHO MURPHY CREEK WATERSHED (043004)							
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
1	0.01	0.0	0.17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.04	
2	0.0	0.0	0.01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.07	
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.09	
4	0.01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.41	0.0	0.0	0.06	
5	0.0	0.0	0.0	0.0	0.09	0.01	0.30	0.0	0.10	0.01	0.15	0.02	
6	0.0	0.0	0.0	0.0	0.08	0.05	0.0	0.0	0.01	0.01	0.11	0.01	
7	0.0	0.0	0.82	0.0	0.01	0.31	0.0	0.0	0.0	0.0	0.04	0.38	
8	0.12	0.0	0.05	0.0	0.31	0.08	0.01	0.0	0.0	0.01	0.25	0.07	
9	0.17	0.0	0.0	0.01	0.22	0.09	0.0	0.0	0.00	0.21	0.50	0.04	
10	0.18	0.0	0.0	0.68	0.09	0.08	0.0	0.0	0.0	0.13	0.0	0.00	
11	0.04	0.0	0.12	0.04	0.01	0.0	0.0	0.0	0.0	0.0	0.34	0.04	
12	0.14	0.26	0.02	0.0	0.03	0.02	0.0	0.0	0.0	0.0	0.04	0.0	
13	0.04	0.0	0.00	0.09	0.11	0.04	0.0	0.01	0.0	0.0	0.0	0.0	
14	0.52	0.0	0.24	0.24	0.0	0.02	0.0	0.0	0.0	0.0	0.0	0.01	
15	0.02	0.0	0.01	0.0	0.0	0.04	0.0	0.0	0.0	0.0	0.0	0.07	
16	0.57	0.30	0.21	0.01	0.0	0.00	0.0	0.0	0.0	0.0	0.0	0.23	
17	0.41	0.15	0.08	0.00	0.0	0.05	0.0	0.0	0.0	0.01	0.0	0.0	
18	0.60	0.01	0.0	0.0	0.0	0.0	0.0	0.0	0.01	0.01	0.09	0.00	
19	0.58	0.0	0.0	0.31	0.19	0.0	0.0	0.0	0.43	0.02	0.0	0.00	
20	0.05	0.0	0.0	0.0	0.09	0.0	0.06	0.0	0.34	0.21	0.0	0.05	
21	0.68	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.01	0.02	0.0	0.10	
22	0.54	0.0	0.0	0.0	0.09	0.0	0.0	0.0	0.0	0.06	0.12	0.03	
23	0.06	0.0	0.0	0.0	0.33	0.01	0.0	0.0	0.0	0.76	0.70	0.00	
24	0.27	0.0	0.0	0.04	0.0	0.0	0.0	0.0	0.0	0.01	0.54	0.00	
25	0.0	0.0	0.0	0.05	0.0	0.01	0.0	0.0	0.0	0.09	0.35	0.00	
26	0.60	0.0	0.08	0.11	0.07	0.04	0.0	0.0	0.0	0.10	0.03	0.01	
27	0.66	0.0	0.0	0.01	0.0	0.44	0.0	0.0	0.0	0.0	0.01	0.04	
28	0.0	0.07	0.05	0.12	0.0	0.74	0.0	0.0	0.0	0.0	0.0	0.07	
29	0.0	0.19	0.0	0.0	0.0	0.02	0.0	0.00	0.0	0.0	0.22	0.14	
30	0.0	0.04	0.0	0.0	0.0	0.0	0.0	0.03	0.0	0.0	0.29	0.02	
31	0.07	0.0	0.0	0.0	0.0	0.0	0.0	0.02	0.0	0.0	0.0	0.07	
TOTAL	6.36	0.79	2.10	1.71	1.71	2.03	0.36	0.05	1.30	1.65	3.76	1.63	
STA AV													

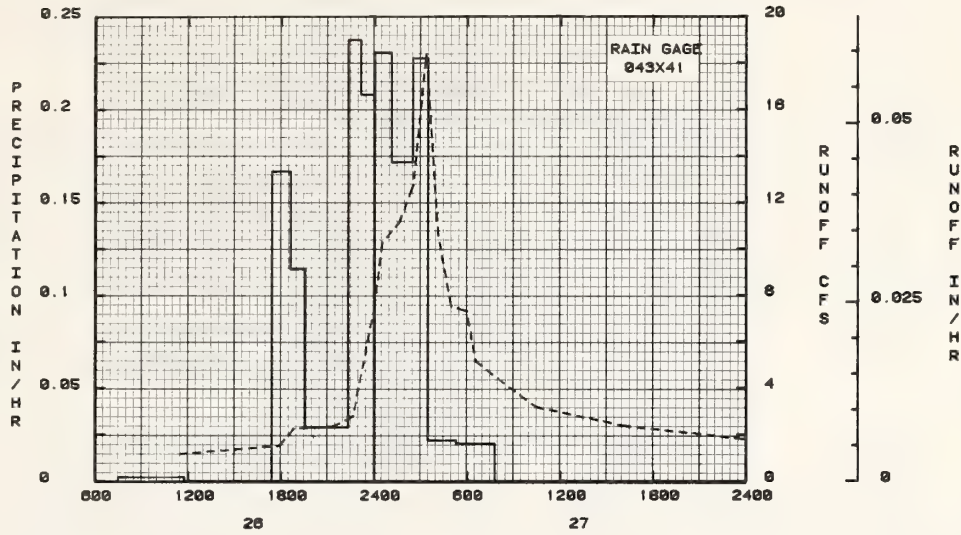
NOTES: Values are Thiessen weighted average amounts from 3 shielded recording gages. STA AV do not apply to shielded rain gage records.

1970 MEAN DAILY DISCHARGE (cfs) REYNOLDS, IDAHO MURPHY CREEK WATERSHED (043004)												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.035	0.707	0.203	0.286	0.576	0.152	0.060	0.004	0.0	0.002	0.027	0.152
2	0.030	0.640	0.197	0.275	0.537	0.145	0.050	0.003	0.0	0.003	0.032	0.133
3	0.030	0.651	0.189	0.242	0.503	0.123	0.047	0.003	0.0	0.003	0.034	0.146
4	0.032	0.537	0.189	0.223	0.485	0.115	0.041	0.003	0.0	0.003	0.034	0.144
5	0.034	0.505	0.174	0.205	0.516	0.109	0.043	0.003	0.0	0.003	0.036	0.308
6	0.027	0.444	0.152	0.197	0.556	0.136	0.050	0.003	0.0	0.003	0.039	0.611
7	0.019	0.437	0.478	0.189	0.556	0.139	0.044	0.003	0.0	0.003	0.039	0.914
8	0.020	0.420	0.683	0.181	0.564	0.127	0.039	0.003	0.0	0.003	0.044	0.926
9	0.036	0.373	0.405	0.181	0.556	0.116	0.039	0.003	0.0	0.006	0.069	0.559
10	0.041	0.300	0.355	0.263	0.556	0.110	0.039	0.003	0.0	0.006	0.093	0.319
11	0.044	0.274	0.387	0.223	0.537	0.135	0.039	0.003	0.0	0.005	0.079	0.286
12	0.061	0.379	0.387	0.214	0.518	0.100	0.034	0.002	0.0	0.005	0.082	0.244
13	0.084	0.326	0.433	0.223	0.503	0.105	0.030	0.002	0.0	0.005	0.063	0.214
14	0.334	0.232	0.564	0.232	0.454	0.105	0.030	0.002	0.0	0.005	0.053	0.214
15	0.258	0.214	0.454	0.269	0.420	0.100	0.027	0.001	0.0 T	0.005	0.050	0.214
16	0.972	0.238	0.420	0.413	0.387	0.095	0.022	0.001	0.001	0.005	0.050	0.225
17	1.758	0.543	0.461	0.674	0.355	0.095	0.016	0.0	0.001	0.005	0.050	0.189
18	2.345	0.312	0.403	0.622	0.340	0.084	0.019	0.0	0.001	0.005	0.050	0.167
19	2.495	0.299	0.415	0.633	0.306	0.072	0.015	0.0	0.001	0.005	0.050	0.150
20	1.353	0.286	0.432	0.567	0.286	0.070	0.012	0.0	0.003	0.007	0.050	0.139
21	2.603	0.263	0.427	0.537	0.263	0.061	0.008	0.0	0.004	0.007	0.044	0.139
22	3.866	0.252	0.420	0.643	0.242	0.054	0.003	0.0	0.003	0.006	0.041	0.152
23	1.951	0.233	0.387	0.731	0.253	0.052	0.003	0.0	0.003	0.023	0.172	0.166
24	1.865	0.223	0.355	0.707	0.244	0.041	0.005	0.0	0.002	0.019	0.322	0.166
25	1.362	0.223	0.340	0.684	0.214	0.035	0.006	0.0	0.002	0.017	0.473	0.166
26	1.679	0.197	0.326	0.708	0.201	0.039	0.005	0.0	0.002	0.013	0.213	0.166
27	4.926	0.189	0.326	0.640	0.197	0.059	0.005	0.0	0.002	0.013	0.134	0.159
28	1.598	0.197	0.312	0.597	0.181	0.134	0.005	0.0	0.002	0.021	0.116	0.152
29	1.187	0.299	0.664	0.181	0.093	0.005	0.0	0.002	0.002	0.025	0.118	0.145
30	0.988	0.286	0.597	0.181	0.070	0.005	0.0	0.002	0.002	0.025	0.154	0.139
31	0.607	0.274		0.166		0.005	0.0			0.025		0.139
MEAN	1.0595	0.3535	0.3592	0.4275	0.2833	0.0939	0.0243	0.0014	0.0011	0.0091	0.0951	0.2563
INCHES	2.555	0.770	0.866	0.997	0.924	0.219	0.059	0.003	0.003	0.022	0.222	0.618
STA AV	1.607	0.716	0.760	1.213	0.775	0.258	0.050	0.002	0.001	0.010	0.107	0.254

NOTES: To convert CFS to IN/DAY, multiply by 0.077783. STA AV based on 1967-70 record period.

1970 SELECTED RUNOFF EVENT REYNOLDS, IDAHO MURPHY CREEK WATERSHED (043004)												
ANTECEDENT CONDITIONS			RAINFALL				RUNOFF					
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.		
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)		
EVENT OF JANUARY 26 - 28, 1970												
RG 043X41												
1-26	0.0	0.044	1-26	728	0.0	0.0	1-26	1126	1.183	0.0		
				1143	0.0024	0.01		1756	1.542	0.0287		
				1723	0.0	0.01		1846	2.259	0.0338		
				1835	0.1667	0.21		2120	2.361	0.0530		
				1933	0.1138	0.32		2238	2.803	0.0639		
WATERSHED CONDITIONS:												
Runoff event was caused by a												
sustained winter rain fol-												
lowing about 10 days of inter-												
mittent rain and snowmelt.												
			1-27	105	0.2308	1.02		320	18.388	0.2161		
				229	0.1714	1.26		408	10.546	0.2536		
				327	0.2276	1.48		458	7.510	0.2780		
				517	0.0218	1.52		558	7.287	0.3026		
				747	0.0200	1.57		634	5.118	0.3141		
								1026	3.168	0.3660		
								1696	2.361	0.4168		
								2400	1.790	0.4699		
								942	1.542	0.5223		
								1-28				

NOTES: To convert CFS to IN/HR, multiply by .003241



EVENT OF JANUARY 26 - 28, 1970
 REYNOLDS, IDAHO MURPHY CREEK WATERSHED (043004)

REYNOLDS, IDAHO SUMMIT WATERSHED (048077)

LOCATION: Owyhee County, Idaho; 30 miles south of Nampa, Idaho, a west-flowing tributary to Reynolds Creek, tributary to the Snake River.

AREA: 205.00 acres

MONTHLY PRECIPITATION AND RUNOFF (inches)														REYNOLDS, IDAHO SUMMIT WATERSHED (048077)															
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual															
1970	P	2.04	0.30	0.91	1.23	1.03	0.99	0.11	0.05	0.56	0.74	1.99	0.66	10.61															
	Q	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0															
STA AV	P	2.22	0.53	0.48	0.64	0.80	1.45	0.10	1.27	0.24	0.87	1.09	0.85	10.54															
	Q	0.002	0.0	0.0	0.0	0.0	0.018	0.0	0.021	0.0	0.0	0.0	0.0	0.041															
ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																													
		Maximum Discharge		1 Hour		2 Hours		Maximum Volume for Selected Time Interval		6 Hours		12 Hours		1 Day		2 Days		8 Days											
		Date	Rate	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.										
1970		0- 0	0.0	0- 0	0.0	0- 0	0.0	0- 0	0.0	0- 0	0.0	0- 0	0.0	0- 0	0.0	0- 0	0.0	0- 0	0.0										
MAXIMUMS FOR PERIOD OF RECORD																													
		6-19	0.258	6-19	0.059	6-19	0.059	6-19	0.070	6-20	0.070	6-20	0.070	6-19	0.070	8- 9	0.083												
		1969		1969		1969		1969		1969		1969		1969		1968													

NOTES: Watershed conditions: Sagebrush rangeland with almost exclusive cattle grazing in early spring and late fall. Numerous barren ridges. Vegetation consists largely of big sagebrush, cheatgrass, Sandberg bluegrass, bluebunch wheatgrass, and squirreltail grass. 25% of the area has a vegetative cover of 0-25% and 75% of the area has a vegetative cover of 25-50%. For map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1967, USDA Misc. Pub. 1262, p. 68.12-5. Records started: Precipitation - 1963; Runoff - 1967. Precipitation: 'Computed Actual' amounts from 1 rain gage. Station average precipitation amounts are based on 1968-70 period of record. Station average runoff amounts are based on 1967-70 period of record. No runoff occurred during 1970. For long-time precipitation records, see National Weather Service records at Boise, Idaho, 50 miles of watershed.

1970 DAILY PRECIPITATION (inches)													REYNOLDS, IDAHO SUMMIT WATERSHED (048077)												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec													
1	0.0	0.0	0.04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0													
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.02													
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.02													
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.26	0.0	0.0	0.0													
5	0.0	0.0	0.0	0.0	0.0	0.0	0.06	0.0	0.0	0.0	0.11	0.0													
6	0.0	0.0	0.0	0.0	0.0	0.05	0.0	0.0	0.0	0.0	0.06	0.0													
7	0.0	0.0	0.25	0.0	0.0	0.05	0.0	0.0	0.0	0.0	0.03	0.04													
8	0.04	0.0	0.03	0.0	0.01	0.0	0.0	0.0	0.0	0.0	0.14	0.04													
9	0.03	0.0	0.0	0.0	0.04	0.0	0.0	0.3	0.0	0.04	0.21	0.0													
10	0.03	0.0	0.0	0.12	0.04	0.11	0.0	0.0	0.0	0.09	0.0	0.06													
11	0.0	0.0	0.12	0.0	0.0	0.0	0.0	0.0	0.0	0.16	0.0	0.0													
12	0.03	0.16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0													
13	0.0	0.0	0.08	0.21	0.12	0.01	0.0	0.0	0.0	0.0	0.0	0.0													
14	0.06	0.0	0.0	0.51	0.0	0.01	0.0	0.0	0.0	0.0	0.0	0.0													
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.03													
16	0.77	0.02	0.14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.30	0.0													
17	0.0	0.06	0.16	0.17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0													
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0													
19	0.05	0.0	0.0	0.0	0.08	0.0	0.0	0.0	0.15	0.0	0.0	0.0													
20	0.0	0.0	0.0	0.0	0.03	0.0	0.04	0.0	0.15	0.01	0.0	0.0													
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0													
22	0.39	0.0	0.0	0.0	0.09	0.0	0.0	0.0	0.0	0.01	0.10	0.0													
23	0.34	0.0	0.0	0.0	0.18	0.15	0.0	0.0	0.0	0.30	0.28	0.0													
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.35	0.0													
25	0.04	0.0	0.0	0.08	0.0	0.0	0.0	0.0	0.0	0.13	0.21	0.04													
26	0.07	0.0	0.09	0.14	0.42	0.02	0.0	0.0	0.0	0.10	0.05	0.0													
27	0.14	0.0	0.0	0.0	0.02	0.33	0.01	0.0	0.0	0.0	0.0	0.0													
28	0.0	0.06	0.0	0.0	0.0	0.23	0.0	0.0	0.0	0.0	0.0	0.0													
29	0.0	0.0	0.0	0.0	0.0	0.03	0.0	0.0	0.0	0.0	0.20	0.08													
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.04	0.0	0.0	0.09	0.0													
31	0.05	0.0	0.0	0.0	0.0	0.0	0.0	0.01	0.0	0.0	0.03	0.0													
TOTAL	2.04	0.30	0.91	1.23	1.03	0.99	0.11	0.05	0.56	0.74	1.99	0.66													
STA AV	2.22	0.53	0.48	0.64	0.80	1.45	0.10	1.27	0.24	0.87	1.09	0.85													

NOTES: Values are 'Actual' amounts from a pair of recording gages (shielded and unshielded) at Station 049161. 'Actual' amounts were computed as per relationship developed by W. R. Hamon, "Computing Actual Precipitation", Proceedings of WMO-IDHS Symposium, Oslo, Norway, August, 1972. The equation used is: $\log_e (U/A) = \log_e (U/S) \times 1.80$, where U = unshielded catchment, S = shielded catchment, and A = actual amount of precipitation. STA AV values are based on 3 yr (1968-70) record period. For temperature information, see table of daily maximum and minimum values included for 68.001.

1970 DAILY PRECIPITATION (inches) REYNOLDS, IDAHO SUMMIT WATERSHED (048077)												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.0	0.0	0.04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.02
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.02
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.17	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.0	0.0	0.06	0.0	0.0	0.0	0.09	0.0
6	0.0	0.0	0.0	0.0	0.0	0.05	0.0	0.0	0.0	0.0	0.05	0.0
7	0.0	0.0	0.25	0.0	0.0	0.05	0.0	0.0	0.0	0.0	0.03	0.03
8	0.04	0.0	0.03	0.0	0.01	0.0	0.0	0.0	0.0	0.0	0.12	0.04
9	0.03	0.0	0.0	0.0	0.04	0.0	0.0	0.0	0.0	0.04	0.15	0.0
10	0.03	0.0	0.0	0.12	0.04	0.11	0.0	0.0	0.0	0.09	0.0	0.06
11	0.0	0.0	0.06	0.0	0.0	0.0	0.0	0.0	0.0	0.06	0.12	0.0
12	0.03	0.16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13	0.0	0.0	0.04	0.10	0.12	0.01	0.0	0.0	0.0	0.0	0.0	0.0
14	0.06	0.0	0.0	0.24	0.0	0.01	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.01
16	0.66	0.02	0.07	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.12
17	0.0	0.06	0.08	0.13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	0.05	0.0	0.0	0.0	0.08	0.0	0.0	0.0	0.12	0.0	0.0	0.0
20	0.0	0.0	0.0	0.0	0.02	0.0	0.04	0.0	0.12	0.01	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.39	0.0	0.0	0.0	0.07	0.0	0.0	0.0	0.0	0.01	0.09	0.0
23	0.34	0.0	0.0	0.0	0.14	0.14	0.0	0.0	0.0	0.25	0.24	0.0
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.29	0.0
25	0.04	0.0	0.0	0.07	0.0	0.0	0.0	0.0	0.0	0.10	0.18	0.04
26	0.07	0.0	0.09	0.12	0.34	0.02	0.0	0.0	0.0	0.08	0.04	0.0
27	0.14	0.0	0.0	0.0	0.02	0.31	0.01	0.0	0.0	0.0	0.0	0.0
28	0.0	0.06	0.0	0.0	0.0	0.22	0.0	0.0	0.0	0.0	0.0	0.0
29	0.0	0.0	0.0	0.0	0.0	0.02	0.0	0.0	0.0	0.0	0.17	0.08
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.04	0.0	0.0	0.07	0.0
31	0.05	0.0	0.0	0.0	0.0	0.0	0.0	0.01	0.0	0.0	0.0	0.03
TOTAL	1.93	0.30	0.66	0.78	0.88	0.94	0.11	0.25	0.41	0.64	1.64	0.45
STA AV												

NOTES: Values are amounts from unshielded recording gage 049461. STA AV do not apply to unshielded rain gage records.

1970 DAILY PRECIPITATION (inches) REYNOLDS, IDAHO SUMMIT WATERSHED (048077)												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.0	0.0	0.04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.03
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.02
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.22	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.0	0.0	0.06	0.0	0.0	0.0	0.10	0.0
6	0.0	0.0	0.0	0.0	0.0	0.05	0.0	0.0	0.0	0.0	0.05	0.0
7	0.0	0.0	0.25	0.0	0.0	0.05	0.0	0.0	0.0	0.0	0.03	0.03
8	0.04	0.0	0.03	0.0	0.01	0.0	0.0	0.0	0.0	0.0	0.14	0.05
9	0.03	0.0	0.0	0.0	0.04	0.0	0.0	0.0	0.0	0.04	0.17	0.0
10	0.03	0.0	0.0	0.12	0.04	0.11	0.0	0.0	0.0	0.09	0.0	0.06
11	0.0	0.0	0.09	0.0	0.0	0.0	0.0	0.0	0.0	0.06	0.14	0.0
12	0.03	0.16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13	0.0	0.0	0.05	0.16	0.12	0.01	0.0	0.0	0.0	0.0	0.0	0.0
14	0.06	0.0	0.0	0.36	0.0	0.01	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.01
16	0.72	0.02	0.11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.20
17	0.0	0.06	0.11	0.15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	0.05	0.0	0.0	0.0	0.08	0.0	0.0	0.0	0.13	0.0	0.0	0.0
20	0.0	0.0	0.0	0.0	0.03	0.0	0.04	0.0	0.14	0.01	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.39	0.0	0.0	0.0	0.08	0.0	0.0	0.0	0.0	0.01	0.10	0.0
23	0.34	0.0	0.0	0.0	0.15	0.14	0.0	0.0	0.0	0.28	0.26	0.0
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.33	0.0
25	0.04	0.0	0.0	0.07	0.0	0.0	0.0	0.0	0.0	0.11	0.19	0.04
26	0.07	0.0	0.09	0.13	0.39	0.03	0.0	0.0	0.0	0.10	0.05	0.0
27	0.14	0.0	0.0	0.0	0.02	0.31	0.01	0.0	0.0	0.0	0.0	0.0
28	0.0	0.06	0.0	0.0	0.0	0.23	0.0	0.0	0.0	0.0	0.0	0.0
29	0.0	0.0	0.0	0.0	0.0	0.02	0.0	0.0	0.0	0.0	0.19	0.08
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.04	0.0	0.0	0.07	0.0
31	0.05	0.0	0.0	0.0	0.0	0.0	0.0	0.01	0.0	0.0	0.0	0.03
TOTAL	1.99	0.30	0.77	0.99	0.96	0.96	0.11	0.05	0.49	0.70	1.82	0.55
STA AV												

NOTES: Values are amounts from shielded recording gage 049561. STA AV do not apply to shielded rain gage records.

REYNOLDS, IDAHO REYNOLDS MOUNTAIN WATERSHED (166076)

LOCATION: Owyhee County, Idaho; 34 miles south of Nampa, north flowing tributary to the east fork of Reynolds Creek, Snake River Basin.

AREA: 100.00 acres

MONTHLY PRECIPITATION AND RUNOFF (inches)														REYNOLDS, IDAHO REYNOLDS MOUNTAIN WATERSHED (166076)															
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual															
1970	P	13.08	1.41	4.42	4.07	2.46	2.58	0.62	0.28	1.08	3.82	7.35	6.59	47.76															
	Q	0.383	0.188	0.214	0.561	12.941	5.050	0.386	0.045	0.065	0.108	0.606	0.329	20.875															
STA AV	P	9.31	3.14	2.38	2.68	1.51	2.14	0.41	1.61	0.57	2.60	4.57	6.51	37.42															
	Q	0.217	0.251	0.399	2.108	8.438	3.668	0.308	0.067	0.048	0.082	0.246	0.168	16.000															
ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																													
		Maximum Discharge		1 Hour		2 Hours		Maximum Volume for Selected Time Interval		1 Day		2 Days		8 Days															
		Date	Rate	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.												
1970		5-17	0.058	5-17	0.054	5-17	0.108	5-17	0.299	5-17	0.492	5-26	0.816	5-25	1.591	5-19	5.720												
MAXIMUMS FOR PERIOD OF RECORD																													
		5-17	0.058	5-17	0.054	5-17	0.108	5-17	0.299	5-22	0.505	5-26	0.816	5-22	1.594	5-19	5.720												
		1970		1970		1970		1970		1967		1970		1967		1970													

NOTES: Watershed conditions: Rangeland watershed with seasonal cattle and sheep grazing. Scrub aspen, willow, scattered Douglas fir, and sagebrush with natural mountain meadows. Vegetative cover varies with annual precipitation type of cover is 32% shrub and brush, 17% grass and forbes, and 9% rock and rock fragments. For map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1966, USDA Misc. Pub. 1226, p. 68.13-4. Records started: Precipitation-1963; Runoff-1966. Precipitation: 'Computed Actual' amounts from one rain gage. Station average precipitation values based on 1968-70 record period. Station average runoff values based on 1966-70 record period. For long-time precipitation records, see National Weather Bureau records at Boise, Idaho, 60 miles N.E. of watershed.

SNOW COURSE DATA: DATE OF MEASUREMENT/AVERAGE WATER CONTENT (INCHES)														
Course#	Date	Inches	Date	Inches	Date	Inches	Date	Inches	Date	Inches	Date	Inches	Date	Inches
176007	011570	6.65	012770	19.20	021070	18.80	021670	20.00	022570	20.80	031070	24.00		
176007	032470	23.40	040770	26.00	042170	28.20	050570	25.00	051970	15.40	120270	4.60		
176007	121670	8.40	123070	12.20										

NOTES: For snow course location information, see Hydrologic Data for Experimental Agricultural Watersheds in the United States 1968, USDA Misc. Pub. 1330, p. 68.001-6.

1970 DAILY AIR TEMPERATURE (degrees F)														REYNOLDS, IDAHO REYNOLDS MOUNTAIN WATERSHED (166076)													
Day	Jan		Feb		Mar		Apr		May		Jun		Jul		Aug		Sep		Oct		Nov		Dec				
	max	min	max	min	max	min	max	min	max	min	max	min	max	min	max	min	max	min	max	min	max	min	max	min			
1	28	18	23	18	42	14	35	16	46	21	66	46	65	45	75	54	69	48	63	46	28	19	26	15			
2	20	8	27	17	24	18	29	19	53	33	69	53	69	54	69	51	67	51	68	51	31	16	27	15			
3	26	9	31	21	21	15	34	12	61	42	73	55	75	68	70	51	69	49	71	53	42	31	27	15			
4	14	6	28	13	26	18	42	25	55	45	71	54	75	56	81	62	50	31	70	54	40	17	27	16			
5	18	3	33	25	31	17	46	30	61	46	71	51	74	53	75	60	44	32	54	28	27	11	35	27			
6	18	10	37	29	43	29	47	23	47	31	71	51	69	55	81	57	55	39	33	22	41	20	40	30			
7	31	16	38	30	40	27	29	12	43	28	57	46	71	56	77	57	65	46	37	22	38	26	38	25			
8	30	17	35	30	27	16	39	23	40	32	60	35	73	56	63	45	54	31	44	27	39	26	30	29			
9	33	27	40	33	35	17	44	30	36	29	43	33	71	55	69	49	55	30	41	35	48	38	29	29			
10	30	26	47	35	29	15	35	19	29	20	44	32	69	51	74	54	67	48	45	29	49	43	28	15			
11	26	24	44	31	33	21	23	15	32	18	47	31	71	53	78	62	56	34	58	37	49	39	47	10			
12	30	27	39	26	34	23	33	13	31	20	44	31	73	56	81	60	42	26	58	36	45	26	21	9			
13	30	27	29	23	46	30	27	17	33	23	43	35	61	47	73	53	40	23	47	31	28	23	23	9			
14	31	27	29	23	46	27	23	19	48	24	49	38	67	46	67	46	42	19	41	27	24	19	24	15			
15	29	26	37	26	38	26	29	13	53	37	50	35	77	57	73	50	45	28	50	33	25	19	30	17			
16	31	27	39	29	42	26	27	11	67	49	55	39	78	58	81	61	61	39	53	40	28	18	23	13			
17	30	29	23	16	28	25	35	16	66	50	55	46	72	53	74	53	70	48	57	43	25	16	19	13			
18	31	29	27	16	32	25	33	18	61	49	66	46	76	57	75	54	67	43	49	34	27	17	19	9			
19	31	29	33	20	30	17	27	17	57	39	70	53	81	63	77	59	43	32	45	31	35	20	15	6			
20	32	30	35	27	40	23	24	14	43	36	74	56	78	53	71	57	43	31	41	26	40	28	27	9			
21	37	29	39	25	40	24	27	9	56	36	76	57	71	50	74	56	43	30	35	26	44	33	21	14			
22	37	31	39	26	41	23	29	17	60	38	77	59	62	45	76	59	54	35	33	22	33	27	17	9			
23	39	31	42	24	44	28	32	19	43	34	78	61	65	45	79	62	49	25	35	27	36	27	18	8			
24	33	24	37	24	35	17	33	24	55	37	75	58	77	55	77	57	37	23	27	21	36	27	26	9			
25	26	21	40	21	39	16	31	23	66	46	77	63	73	55	77	58	47	27	27	20	28	21	26	7			
26	31	26	45	23	28	18	36	13	63	45	79	52	73	57	76	56	59	38	22	14	23	18	27	6			
27	31	12	39	27	31	14	26	11	53	37	56	44	72	60	75	56	65	47	29	13	30	23	22	16			
28	20	12	33	27	29	20	26	16	49	34	49	36	71	55	74	51	68	51	42	22	34	27	26	20			
29	21	13			23	17	31	21	54	36	43	31	69	50	70	51	70	55	54	36	34	25	26	17			
30	25	17			25	15	35	24	47	31	54	34	67	48	74	51	65	49	26	20	28	16	28	22			
31	25	18			23	11			56	34			69	49	76	53			23	17			28	13			
AV.	28	21	35	24	34	20	32	18	50	35	61	45	71	54	75	55	55	37	44	30	35	24	26	15			
MEAN	24.6		29.9		27.1		25.1		42.7		53.4		62.5		64.8		46.2		37.5		29.2		20.8				
STA AV	28	20	33	22	33	22	38	22	54	36	62	43	73	54	72	53	62	44	46	32	37	26	27	18			

NOTES: Temperature data are taken from hygrothermograph record at station 176X14. STA AV based on 1966-70 record period.

1970	DAILY PRECIPITATION (inches)					REYNOLDS, IDAHO REYNOLDS MOUNTAIN WATERSHED (166076)						
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.0	0.0	0.37	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.06
2	0.0	0.04	0.41	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.52
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.46
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.26	0.0	0.03	0.08
5	0.0	0.0	0.0	0.0	0.0	0.0	0.28	0.05	0.11	0.0	0.28	0.0
6	0.0	0.0	0.0	0.0	0.09	0.02	0.0	0.0	0.0	0.0	0.26	0.0
7	0.0	0.0	0.95	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.08	0.85
8	0.22	0.0	0.61	0.0	0.63	0.49	0.23	0.0	0.0	0.0	0.42	0.09
9	0.22	0.0	0.0	0.0	0.27	0.10	0.0	0.0	0.0	0.39	1.01	0.11
10	0.31	0.0	0.0	0.51	0.32	0.28	0.0	0.0	0.0	0.06	0.0	0.12
11	0.09	0.0	0.13	0.08	0.06	0.0	0.0	0.0	0.0	0.0	0.78	0.0
12	0.36	0.28	0.04	0.0	0.14	0.0	0.0	0.0	0.0	0.0	0.04	0.0
13	0.17	0.0	0.0	1.04	0.21	0.11	0.0	0.0	0.0	0.05	0.0	0.22
14	0.53	0.0	0.43	0.91	0.0	0.08	0.0	0.0	0.0	0.0	0.0	0.11
15	0.31	0.0	0.0	0.0	0.0	0.06	0.0	0.0	0.0	0.0	0.0	0.15
16	1.41	0.36	0.32	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.01
17	1.00	0.41	0.11	0.0	0.0	0.07	0.0	0.0	0.0	0.0	0.0	0.0
18	1.21	0.02	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.28	0.0
19	0.45	0.0	0.0	0.84	0.0	0.0	0.0	0.0	0.63	0.0	0.0	0.0
20	0.20	0.0	0.0	0.0	0.20	0.0	0.11	0.0	0.08	0.28	0.0	0.39
21	1.01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.19	0.0	0.09
22	0.68	0.0	0.0	0.0	0.02	0.02	0.0	0.0	0.0	0.12	0.18	0.07
23	0.10	0.0	0.0	0.0	0.40	0.0	0.0	0.0	0.0	1.71	1.06	0.0
24	0.38	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.14	1.12	0.0
25	0.08	0.0	0.0	0.18	0.0	0.0	0.0	0.0	0.0	0.35	0.41	0.0
26	1.28	0.0	0.13	0.49	0.12	0.03	0.0	0.0	0.0	0.53	0.32	0.04
27	2.40	0.0	0.0	0.0	0.0	0.53	0.0	0.0	0.0	0.0	0.0	0.16
28	0.37	0.30	0.14	0.02	0.0	0.68	0.0	0.0	0.0	0.0	0.0	0.96
29	0.0	0.0	0.41	0.0	0.0	0.11	0.0	0.0	0.0	0.0	0.28	0.48
30	0.0	0.0	0.37	0.0	0.0	0.0	0.0	0.22	0.0	0.0	0.80	0.16
31	0.60	0.0	0.0	0.0	0.0	0.0	0.0	0.01	0.0	0.0	0.0	0.46
TOTAL	13.08	1.41	4.42	4.07	2.46	2.58	0.62	0.28	1.08	3.82	7.35	6.59
STA AV	9.31	3.14	2.38	2.68	1.51	2.14	0.41	1.61	0.57	2.60	4.57	6.51

NOTES: Values are 'Actual' amounts from a pair of recording gages (shielded and unshielded) at Station 166X94. 'Actual' amounts were computed as per relationship developed by W. R. Hamon, "Computing Actual Precipitation", Proceedings of WMO-IPRS Symposium, Geilo, Norway, August, 1972. The equation used is: $\log_e (U/L) = \log_e (U/S) \times 1.80$, where U = unshielded catchment, S = shielded catchment, and A = actual amount of precipitation. STA AV values are based on 3 yr (1968-70) record period.

1970	DAILY PRECIPITATION (inches)					REYNOLDS, IDAHO REYNOLDS MOUNTAIN WATERSHED (166076)						
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.0	0.0	0.12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.03
2	0.0	0.04	0.09	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.24
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.67
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.22	0.0	0.03	0.03
5	0.0	0.0	0.0	0.0	0.0	0.0	0.27	0.05	0.09	0.0	0.23	0.0
6	0.0	0.0	0.0	0.0	0.07	0.02	0.0	0.0	0.0	0.0	0.22	0.0
7	0.0	0.0	0.12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.07	0.38
8	0.22	0.0	0.05	0.0	0.47	0.49	0.23	0.0	0.0	0.0	0.34	0.02
9	0.22	0.0	0.0	0.0	0.20	0.10	0.0	0.0	0.0	0.39	0.85	0.03
10	0.31	0.0	0.0	0.35	0.24	0.28	0.0	0.0	0.0	0.06	0.0	0.04
11	0.09	0.0	0.07	0.06	0.03	0.0	0.0	0.0	0.0	0.0	0.48	0.0
12	0.36	0.23	0.02	0.0	0.07	0.0	0.0	0.0	0.0	0.0	0.02	0.0
13	0.10	0.0	0.0	0.32	0.10	0.11	0.0	0.0	0.0	0.05	0.0	0.07
14	0.26	0.0	0.22	0.28	0.0	0.08	0.0	0.0	0.0	0.0	0.0	0.10
15	0.15	0.0	0.0	0.0	0.0	0.06	0.0	0.0	0.0	0.0	0.0	0.15
16	0.71	0.17	0.18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.01
17	0.48	0.19	0.06	0.0	0.0	0.07	0.0	0.0	0.0	0.0	0.0	0.0
18	0.59	0.01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.27	0.0
19	0.22	0.0	0.0	0.26	0.0	0.0	0.0	0.0	0.63	0.0	0.0	0.0
20	0.14	0.0	0.0	0.0	0.18	0.0	0.11	0.0	0.08	0.28	0.0	0.38
21	1.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.08	0.0	0.09
22	0.67	0.0	0.0	0.0	0.02	0.02	0.0	0.0	0.0	0.05	0.17	0.07
23	0.05	0.0	0.0	0.0	0.36	0.0	0.0	0.0	0.0	0.70	0.98	0.0
24	0.19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.06	1.06	0.0
25	0.04	0.0	0.0	0.05	0.0	0.0	0.0	0.0	0.0	0.14	0.27	0.0
26	0.64	0.0	0.03	0.14	0.12	0.03	0.0	0.0	0.0	0.21	0.16	0.01
27	0.64	0.0	0.0	0.0	0.0	0.53	0.0	0.0	0.0	0.0	0.0	0.07
28	0.02	0.10	0.03	0.02	0.0	0.68	0.0	0.0	0.0	0.0	0.0	0.48
29	0.0	0.0	0.09	0.0	0.0	0.11	0.0	0.0	0.0	0.0	0.14	0.19
30	0.0	0.0	0.08	0.0	0.0	0.0	0.0	0.16	0.0	0.0	0.43	0.03
31	0.16	0.0	0.0	0.0	0.0	0.0	0.0	0.01	0.0	0.0	0.0	0.11
TOTAL	7.26	0.74	1.16	1.48	1.86	2.58	0.61	0.22	1.02	2.02	5.72	3.20
STA AV												

NOTES: Values are amounts from unshielded recording gage 166494. STA AV do not apply to unshielded rain gage records.

1970 DAILY PRECIPITATION (inches) REYNOLDS, IDAHO REYNOLDS MOUNTAIN WATERSHED (166076)												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.0	0.0	0.23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.04
2	0.0	0.04	0.21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.37
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.03
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.24	0.0	0.04	0.06
5	0.0	0.0	0.0	0.0	0.0	0.0	0.28	0.05	0.10	0.0	0.25	0.0
6	0.0	0.0	0.0	0.0	0.08	0.02	0.0	0.0	0.0	0.0	0.24	0.0
7	0.0	0.0	0.44	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.08	0.60
8	0.22	0.0	0.28	0.0	0.56	0.49	0.23	0.0	0.0	0.0	0.38	0.06
9	0.22	0.0	0.0	0.0	0.23	0.10	0.0	0.0	0.0	0.39	0.94	0.08
10	0.31	0.0	0.0	0.44	0.29	0.28	0.0	0.0	0.0	0.06	0.0	0.08
11	0.09	0.0	0.10	0.07	0.04	0.0	0.0	0.0	0.0	0.0	0.63	0.0
12	0.36	0.26	0.03	0.0	0.11	0.0	0.0	0.0	0.0	0.0	0.02	0.0
13	0.14	0.0	0.0	0.62	0.15	0.11	0.0	0.0	0.0	0.05	0.0	0.15
14	0.40	0.0	0.32	0.53	0.0	0.08	0.0	0.0	0.0	0.0	0.0	0.10
15	0.24	0.0	0.0	0.0	0.0	0.06	0.0	0.0	0.0	0.0	0.0	0.16
16	1.07	0.26	0.24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.01
17	0.76	0.28	0.09	0.0	0.0	0.07	0.0	0.0	0.0	0.0	0.0	0.0
18	0.92	0.02	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.28	0.0
19	0.34	0.0	0.0	0.50	0.0	0.0	0.0	0.0	0.63	0.0	0.0	0.0
20	0.18	0.0	0.0	0.0	0.19	0.0	0.11	0.0	0.08	0.28	0.0	0.38
21	1.01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.13	0.0	0.10
22	0.67	0.0	0.0	0.0	0.02	0.02	0.0	0.0	0.0	0.08	0.18	0.07
23	0.07	0.0	0.0	0.0	0.38	0.0	0.0	0.0	0.0	1.15	1.03	0.0
24	0.28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.09	1.09	0.0
25	0.06	0.0	0.0	0.10	0.0	0.0	0.0	0.0	0.0	0.24	0.34	0.0
26	0.94	0.0	0.07	0.28	0.12	0.03	0.0	0.0	0.0	0.35	0.24	0.02
27	1.34	0.0	0.0	0.0	0.0	0.53	0.0	0.0	0.0	0.0	0.0	0.12
28	0.04	0.18	0.07	0.02	0.0	0.68	0.0	0.0	0.0	0.0	0.0	0.71
29	0.0	0.0	0.21	0.0	0.0	0.11	0.0	0.0	0.0	0.0	0.21	0.31
30	0.0	0.0	0.18	0.0	0.0	0.0	0.0	0.18	0.0	0.0	0.61	0.09
31	0.33	0.0	0.0	0.0	0.0	0.0	0.0	0.02	0.0	0.0	0.0	0.24
TOTAL	9.99	1.04	2.47	2.56	2.17	2.58	0.62	0.25	1.05	2.82	6.56	4.78
STA AV												

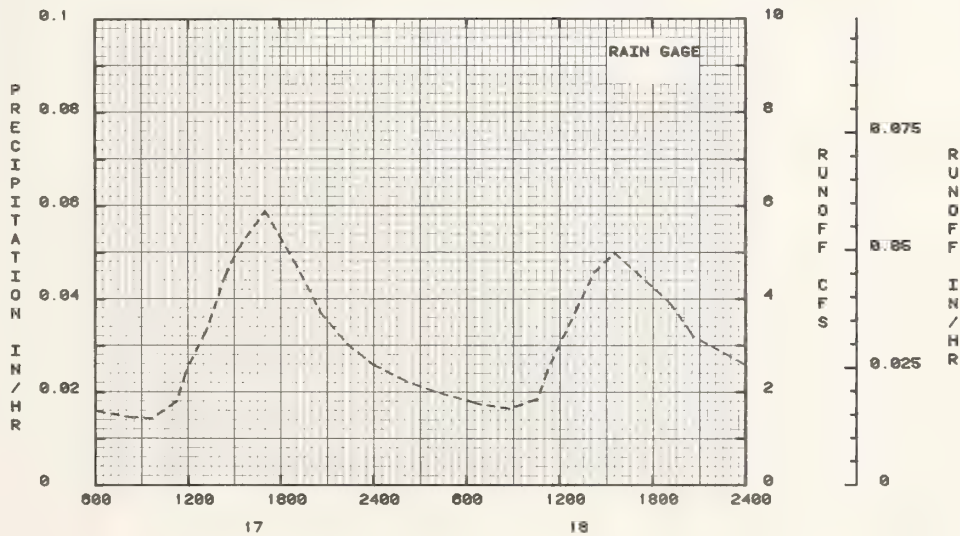
NOTES: Values are amounts from shielded recording gage 166594. STA AV do not apply to shielded rain gage records.

1970 MEAN DAILY DISCHARGE (cfs) REYNOLDS, IDAHO REYNOLDS MOUNTAIN WATERSHED (166076)												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.015	0.037	0.024	0.026	0.072	1.646	0.158	0.013	0.004	0.008	0.019	0.066
2	0.015	0.038	0.024	0.026	0.165	1.680	0.128	0.012	0.003	0.009	0.018	0.068
3	0.015	0.033	0.023	0.026	0.430	1.609	0.106	0.012	0.003	0.009	0.018	0.059
4	0.015	0.032	0.022	0.028	1.042	1.482	0.091	0.009	0.012	0.009	0.016	0.054
5	0.015	0.032	0.022	0.033	1.266	1.339	0.101	0.012	0.011	0.009	0.030	0.054
6	0.014	0.030	0.022	0.066	1.184	1.177	0.094	0.009	0.008	0.011	0.028	0.053
7	0.013	0.028	0.029	0.091	1.099	1.076	0.073	0.007	0.007	0.011	0.024	0.051
8	0.013	0.027	0.038	0.082	1.310	1.080	0.089	0.008	0.006	0.012	0.023	0.052
9	0.013	0.026	0.035	0.099	1.285	1.040	0.075	0.008	0.006	0.026	0.105	0.053
10	0.016	0.027	0.033	0.188	0.798	0.916	0.066	0.007	0.005	0.015	0.050	0.051
11	0.013	0.027	0.030	0.227	0.570	0.679	0.056	0.005	0.005	0.011	0.042	0.050
12	0.013	0.026	0.027	0.163	0.484	0.593	0.047	0.005	0.007	0.011	0.040	0.049
13	0.013	0.026	0.032	0.123	0.418	0.581	0.043	0.006	0.009	0.012	0.034	0.047
14	0.013	0.027	0.037	0.104	0.441	0.581	0.047	0.005	0.010	0.013	0.027	0.045
15	0.013	0.026	0.036	0.094	0.991	0.543	0.041	0.005	0.010	0.012	0.027	0.044
16	0.013	0.026	0.035	0.086	2.205	0.472	0.037	0.004	0.009	0.013	0.027	0.043
17	0.013	0.027	0.033	0.081	2.986	0.456	0.034	0.004	0.008	0.014	0.025	0.042
18	0.013	0.027	0.030	0.080	2.917	0.433	0.031	0.004	0.008	0.013	0.020	0.042
19	0.013	0.027	0.030	0.077	2.659	0.405	0.028	0.004	0.027	0.013	0.025	0.041
20	0.014	0.027	0.029	0.072	2.356	0.384	0.032	0.005	0.014	0.018	0.024	0.039
21	0.048	0.027	0.028	0.068	2.992	0.354	0.031	0.006	0.012	0.018	0.022	0.038
22	0.237	0.027	0.027	0.065	2.846	0.330	0.029	0.004	0.010	0.015	0.020	0.037
23	0.324	0.027	0.027	0.063	3.214	0.309	0.028	0.003	0.010	0.015	0.077	0.036
24	0.241	0.026	0.027	0.061	3.106	0.285	0.023	0.002	0.010	0.023	0.708	0.035
25	0.135	0.025	0.028	0.058	3.263	0.248	0.022	0.003	0.011	0.023	0.584	0.034
26	0.087	0.025	0.028	0.055	3.392	0.227	0.019	0.003	0.011	0.019	0.171	0.033
27	0.069	0.026	0.028	0.054	2.842	0.301	0.021	0.003	0.009	0.017	0.117	0.033
28	0.057	0.025	0.028	0.053	2.381	0.469	0.019	0.003	0.009	0.016	0.092	0.032
29	0.049	0.028	0.028	0.052	2.105	0.317	0.018	0.004	0.009	0.018	0.078	0.032
30	0.044	0.027	0.054	0.054	1.889	0.203	0.017	0.009	0.009	0.018	0.055	0.032
31	0.040	0.026	0.026	0.054	1.665	0.155	0.015	0.007	0.007	0.022	0.032	0.032
MEAN	0.0518	0.0282	0.0290	0.0786	1.7539	0.7072	0.0523	0.0061	0.0090	0.0146	0.0849	0.0446
INCHES	0.383	0.186	0.214	0.561	12.941	5.050	0.386	0.045	0.065	0.108	0.606	0.329
STA AV	0.217	0.251	0.399	2.108	8.438	3.668	0.308	0.067	0.048	0.082	0.246	0.168

NOTES: To convert CFS to IN/DAY, multiply by 0.238017. STA AV based on 5 yr (1966-70) record period.

1970	SELECTED RUNOFF EVENT			REYNOLDS, IDAHO REYNOLDS MOUNTAIN WATERSHED (166076)							
ANTECEDENT CONDITIONS			RAINFALL				RUNOFF				
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.	
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)	
EVENT OF MAY 17 - 18, 1970											
5-17	RG			RG							
	0.0	0.123	5-17	2400	0.0	0.0	5-17	610	1.592	0.0	
								815	1.463	0.0316	
								940	1.441	0.0520	
								1115	1.813	0.0776	
								1155	2.478	0.0918	
WATERSHED CONDITIONS: For Watershed W-13(166076) runoff event occurred as the result of warmer temperatures and winds. This is a strictly snowmelt event with no precipitation.								1315	3.379	0.1305	
								1425	4.513	0.1761	
								1515	5.079	0.2157	
								1700	5.889	0.3109	
								1905	4.691	0.4202	
								2035	3.707	0.4827	
								2220	3.021	0.5411	
								2400	2.584	0.5874	
								5-18	210	2.221	0.6390
									355	2.014	0.6757
								655	1.728	0.7314	
								845	1.635	0.7620	
								1035	1.849	0.7937	
								1115	2.478	0.8080	
								1305	3.746	0.8646	
								1415	4.566	0.9127	
								1535	4.985	0.9758	
								1910	3.905	1.1338	
								2040	3.182	1.1865	
								2400	2.577	1.2817	

NOTES: To convert CFS to IN/HR, multiply by 0.009917.



EVENT OF MAY 17 - 18, 1970
 REYNOLDS, IDAHO REYNOLDS MOUNTAIN WATERSHED (166076)

REYNOLDS, IDAHO LOWER SHEEP CREEK WATERSHED (117066)

LOCATION: Owyhee County, Idaho; 40 miles south of Nampa, Idaho; a tributary to Reynolds Creek, a tributary to the Snake River.

AREA: 33.00 acres

MONTHLY PRECIPITATION AND RUNOFF (inches)														REYNOLDS, IDAHO LOWER SHEEP CREEK WATERSHED (117066)													
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual														
1970	P	3.46	0.71	1.83	1.61	1.27	1.47	0.32	0.36	0.68	1.16	2.49	0.59	15.95													
	Q	0.314	0.001	0.006	0.001	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.022													
STA AV	P	2.73	0.68	0.84	0.89	1.00	1.34	0.25	1.01	0.39	0.96	1.59	1.13	12.81													
	Q	0.098	0.009	0.116	0.008	0.0	0.002	0.0	0.0	0.0	0.0	0.0	0.0	0.233													
ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																											
	Maximum Discharge Date	Rate	1 Hour Date	Vol.	2 Hours Date	Vol.	6 Hours Date	Vol.	12 Hours Date	Vol.	1 Day Date	Vol.	2 Days Date	Vol.	8 Days Date	Vol.											
1970	1-27	0.002	1-27	0.001	1-27	0.002	1-27	0.007	1-26	0.011	1-26	0.014	1-25	0.014	1-19	0.014											
MAXIMUMS FOR PERIOD OF RECORD																											
	1-21	0.042	1-21	0.029	1-21	0.048	1-21	0.065	1-20	0.106	1-20	0.160	1-20	0.192	1-19	0.229											
	1967		1967		1967		1967		1969		1969		1969		1969												

NOTES: Watershed conditions: Watershed is entirely sagebrush rangeland used almost exclusively for cattle grazing. Vegetation consists of bluebunch wheatgrass, Sandberg bluegrass, cheatgrass, yellow, and little sagebrush. 90% of the area has a vegetative cover of 0-25% and 10% of the area has a vegetative cover of 26-50%. For map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1967, USDA Misc. Pub. 1262, p. 68.014-6. Records began: Precipitation-1963; Runoff-1967. Precipitation: 'Computed Actual' amounts from one rain gage. Station average precipitation amounts are based on 1968-70 record period. Station average runoff amounts are based on 1967-70 record period. For long-time precipitation records, see National Weather Bureau records at Boise, Idaho, 50 miles N.E. of watershed.

1970 DAILY AIR TEMPERATURE (degrees F)														REYNOLDS, IDAHO LOWER SHEEP CREEK WATERSHED (117066)													
Day	Jan max min	Feb max min	Mar max min	Apr max min	May max min	Jun max min	Jul max min	Aug max min	Sep max min	Oct max min	Nov max min	Dec max min															
1	21 18	28 19	48 18	48 27	55 30	74 42	72 48	85 55	71 51	67 47	47 36	31 19															
2	25 9	37 20	29 22	39 31	65 41	79 48	75 56	74 56	73 53	71 51	43 34	32 19															
3	22 11	39 15	34 33	46 21	67 47	82 53	82 51	80 52	77 50	73 55	42 32	32 19															
4	15 10	32 19	37 32	58 38	73 52	82 60	83 61	88 54	51 35	76 58	38 30	32 20															
5	15 5	37 31	41 31	62 41	67 51	81 62	81 54	82 78	51 37	61 30	39 36	40 31															
6	15 5	43 30	49 34	65 21	52 38	78 56	74 57	88 61	64 46	39 27	41 33	45 35															
7	15 6	40 30	54 28	39 21	52 35	62 54	79 49	79 59	74 52	43 26	37 30	43 30															
8	31 11	42 32	32 20	54 38	48 39	66 41	83 63	69 51	59 36	48 29	38 30	35 34															
9	38 21	43 30	34 24	58 31	44 33	56 50	80 62	73 51	59 34	45 38	41 31	34 34															
10	36 28	45 33	38 28	46 27	35 26	53 43	71 56	78 57	67 43	48 31	38 29	33 19															
11	29 27	44 35	38 25	37 21	42 26	53 35	77 57	85 65	62 39	63 41	41 33	32 14															
12	32 29	48 27	39 27	39 20	40 25	49 34	83 61	85 63	48 31	52 33	33 25	26 13															
13	36 31	37 28	52 35	38 26	37 30	47 40	70 52	79 58	46 27	48 31	34 22	28 13															
14	35 30	37 27	52 32	30 23	51 29	57 43	75 50	74 52	48 23	51 30	35 22	29 19															
15	33 29	45 34	43 31	35 20	65 39	58 41	85 62	80 56	51 33	54 25	43 25	35 22															
16	34 29	46 22	48 31	41 24	77 55	61 42	87 64	89 67	63 50	56 28	44 31	28 17															
17	36 32	28 20	33 30	45 27	70 55	63 50	77 57	81 59	73 51	58 30	43 29	24 17															
18	37 32	32 20	37 29	45 28	68 49	73 48	84 61	77 56	73 47	52 37	31 27	24 13															
19	39 34	38 24	35 21	35 21	61 42	76 57	90 67	83 59	50 37	54 34	34 27	19 9															
20	42 34	40 32	46 27	39 27	50 40	81 61	87 59	79 60	50 35	49 37	36 29	23 12															
21	43 33	44 29	45 28	41 23	63 40	83 61	80 57	79 59	50 34	47 35	30 16	26 18															
22	44 31	44 31	47 27	44 32	64 44	84 60	68 60	82 61	62 39	41 37	21 16	21 13															
23	47 39	48 28	50 33	49 31	51 39	66 64	75 51	85 63	55 33	40 29	45 22	23 12															
24	36 29	42 28	44 24	50 35	61 41	83 61	83 51	86 66	43 27	33 25	47 38	20 13															
25	33 27	47 32	41 25	45 28	72 49	84 65	78 58	81 61	51 29	31 24	39 26	20 11															
26	36 30	45 35	43 33	36 23	70 50	85 57	83 56	78 58	61 37	25 17	28 22	21 9															
27	36 16	51 37	45 25	37 23	61 43	61 50	80 63	77 60	67 45	32 15	35 27	27 20															
28	25 16	41 33	41 29	38 25	55 36	54 42	82 59	81 57	73 51	36 23	39 31	31 24															
29	28 19		32 25	48 40	61 40	49 36	76 55	77 57	72 56	41 30	39 30	31 21															
30	28 17		43 33	46 31	53 38	59 40	71 51	81 57	71 54	41 30	33 20	33 26															
31	31 21		39 28		61 37		79 50	83 59		49 36		33 17															
AV.	31 23	41 28	42 28	44 27	58 40	69 50	79 57	81 59	61 41	49 33	38 28	29 19															
MEAN	27.2	34.4	34.8	36.0	48.9	59.3	67.9	69.8	50.5	41.1	32.9	24.3															
STA AV	33 23	40 27	42 28	46 29	60 40	67 49	81 59	79 57	66 48	51 35	41 29	32 21															

NOTES: Temperature data taken from hygrothermograph record at Station 127149. STA AV based on 4 yr (1967-70) record period.

REYNOLDS, IDAHO LOWER SHEEP CREEK WATERSHED (117066)												
1970	DAILY PRECIPITATION (inches)											
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.0	0.0	0.11	0.02	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3	0.0	0.06	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.04
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.34	0.0	0.03	0.0
5	0.0	0.0	0.0	0.0	0.0	0.0	0.28	0.21	0.04	0.0	0.11	0.0
6	0.0	0.0	0.0	0.0	0.02	0.05	0.0	0.0	0.0	0.0	0.15	0.0
7	0.0	0.0	0.31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.01	0.21
8	0.03	0.0	0.15	0.0	0.14	0.11	0.0	0.0	0.0	0.0	0.08	0.16
9	0.14	0.0	0.0	0.0	0.13	0.05	0.0	0.0	0.0	0.14	0.22	0.0
10	0.06	0.0	0.0	0.18	0.21	0.15	0.0	0.0	0.0	0.01	0.0	0.0
11	0.0	0.0	0.08	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.21	0.01
12	0.06	0.16	0.0	0.0	0.03	0.0	0.0	0.0	0.0	0.05	0.0	0.0
13	0.02	0.0	0.0	0.70	0.03	0.06	0.0	0.0	0.0	0.0	0.0	0.0
14	0.14	0.0	0.08	0.31	0.0	0.02	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.02	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.33	0.25	0.67	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.04
17	0.23	0.11	0.10	0.0	0.0	0.03	0.0	0.0	0.0	0.0	0.0	0.0
18	0.14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.02	0.0
19	0.10	0.0	0.0	0.07	0.0	0.0	0.0	0.0	0.26	0.0	0.0	0.0
20	0.06	0.0	0.0	0.0	0.10	0.0	0.04	0.0	0.04	0.10	0.0	0.02
21	0.48	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.06	0.0	0.0
22	0.29	0.0	0.0	0.0	0.15	0.0	0.0	0.0	0.0	0.07	0.08	0.0
23	0.07	0.0	0.0	0.0	0.46	0.23	0.0	0.0	0.0	0.45	0.18	0.0
24	0.20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.68	0.04
25	0.06	0.0	0.0	0.13	0.0	0.0	0.0	0.0	0.0	0.06	0.13	0.0
26	0.57	0.0	0.05	0.15	0.0	0.04	0.0	0.0	0.0	0.22	0.04	0.0
27	0.48	0.0	0.0	0.0	0.0	0.25	0.0	0.0	0.0	0.0	0.0	0.0
28	0.0	0.13	0.05	0.05	0.0	0.38	0.0	0.0	0.0	0.0	0.0	0.0
29	0.0	0.21	0.0	0.0	0.0	0.10	0.0	0.0	0.0	0.0	0.45	0.0
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.15	0.0	0.0	0.10	0.02
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.05
TOTAL	3.46	0.71	1.83	1.61	1.27	1.47	0.32	0.36	0.68	1.16	2.49	0.59
STA AV	2.73	0.68	0.84	0.89	1.00	1.34	0.25	1.01	0.39	0.96	1.59	1.13

NOTES: Values are 'Actual' amounts from a pair of recording gages (shielded and unshielded) 127X07. 'Actual' amounts were computed as per relationship developed by W. R. Hamon, "Computing Actual Precipitation", Proceedings of WHO-IDHS Symposium, Geilo, Norway, August, 1972. The equation used is: $\log_e (U/A) = \log_e (U/S) \times 1.80$, where U = unshielded catchment, S = shielded catchment, and A = actual amount of precipitation. STA AV values are based on 3 yr (1968-70) record period.

REYNOLDS, IDAHO LOWER SHEEP CREEK WATERSHED (117066)												
1970	DAILY PRECIPITATION (inches)											
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.0	0.0	0.10	0.01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3	0.0	0.06	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.03
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.31	0.0	0.03	0.0
5	0.0	0.0	0.0	0.0	0.0	0.0	0.28	0.19	0.04	0.0	0.11	0.0
6	0.0	0.0	0.0	0.0	0.02	0.05	0.0	0.0	0.0	0.0	0.15	0.0
7	0.0	0.0	0.23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.01	0.14
8	0.02	0.0	0.11	0.0	0.09	0.10	0.0	0.0	0.0	0.0	0.08	0.12
9	0.09	0.0	0.0	0.0	0.08	0.04	0.0	0.0	0.0	0.11	0.22	0.0
10	0.04	0.0	0.0	0.18	0.13	0.14	0.0	0.0	0.0	0.01	0.0	0.0
11	0.0	0.0	0.06	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.21	0.01
12	0.06	0.16	0.0	0.0	0.02	0.0	0.0	0.0	0.0	0.04	0.0	0.0
13	0.02	0.0	0.0	0.20	0.02	0.06	0.0	0.0	0.0	0.0	0.0	0.0
14	0.14	0.0	0.08	0.09	0.0	0.02	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.02	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.33	0.25	0.25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.04
17	0.23	0.11	0.04	0.0	0.0	0.03	0.0	0.0	0.0	0.0	0.0	0.0
18	0.14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.02	0.0
19	0.10	0.0	0.0	0.07	0.0	0.0	0.0	0.0	0.26	0.0	0.0	0.0
20	0.06	0.0	0.0	0.0	0.10	0.0	0.04	0.0	0.04	0.10	0.0	0.02
21	0.48	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.06	0.0	0.0
22	0.29	0.0	0.0	0.0	0.12	0.0	0.0	0.0	0.0	0.06	0.08	0.0
23	0.07	0.0	0.0	0.0	0.37	0.23	0.0	0.0	0.0	0.37	0.17	0.0
24	0.20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.68	0.04
25	0.06	0.0	0.0	0.05	0.0	0.0	0.0	0.0	0.0	0.05	0.13	0.0
26	0.57	0.0	0.05	0.06	0.0	0.04	0.0	0.0	0.0	0.18	0.04	0.0
27	0.48	0.0	0.0	0.0	0.0	0.25	0.0	0.0	0.0	0.0	0.0	0.0
28	0.0	0.11	0.02	0.02	0.0	0.38	0.0	0.0	0.0	0.0	0.0	0.0
29	0.0	0.10	0.0	0.0	0.0	0.10	0.0	0.0	0.0	0.0	0.26	0.0
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.15	0.0	0.0	0.06	0.02
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.05
TOTAL	3.38	0.69	1.06	0.68	0.95	1.44	0.32	0.34	0.65	0.98	2.25	0.47
STA AV												

NOTES: Values are amounts from unshielded recording gage 127407. STA AV do not apply to unshielded rain gage records.

1970 DAILY PRECIPITATION (inches) REYNOLDS, IDAHO LOWER SHEEP CREEK WATERSHED (117066)												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.0	0.0	0.11	0.02	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3	0.0	0.06	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.04
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.33	0.0	0.03	0.0
5	0.0	0.0	0.0	0.0	0.0	0.0	0.28	0.20	0.04	0.0	0.11	0.0
6	0.0	0.0	0.0	0.0	0.02	0.05	0.0	0.0	0.0	0.0	0.15	0.0
7	0.0	0.0	0.27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.01	0.18
8	0.02	0.0	0.13	0.0	0.12	0.10	0.0	0.0	0.0	0.0	0.08	0.14
9	0.12	0.0	0.0	0.0	0.11	0.05	0.0	0.0	0.0	0.13	0.22	0.0
10	0.05	0.0	0.0	0.18	0.16	0.14	0.0	0.0	0.0	0.01	0.0	0.0
11	0.0	0.0	0.07	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.21	0.01
12	0.06	0.15	0.0	0.0	0.03	0.0	0.0	0.0	0.0	0.04	0.0	0.0
13	0.02	0.0	0.0	0.40	0.03	0.06	0.0	0.0	0.0	0.0	0.0	0.0
14	0.14	0.0	0.08	0.18	0.0	0.02	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.02	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.33	0.25	0.43	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.04
17	0.23	0.11	0.07	0.0	0.0	0.03	0.0	0.0	0.0	0.0	0.0	0.0
18	0.14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.02	0.0
19	0.10	0.0	0.0	0.07	0.0	0.0	0.0	0.0	0.26	0.0	0.0	0.0
20	0.06	0.0	0.0	0.0	0.10	0.0	0.04	0.0	0.04	0.10	0.0	0.02
21	0.48	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.07	0.0	0.0
22	0.29	0.0	0.0	0.0	0.13	0.0	0.0	0.0	0.0	0.06	0.08	0.0
23	0.07	0.0	0.0	0.0	0.42	0.23	0.0	0.0	0.0	0.41	0.18	0.0
24	0.20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.68	0.04
25	0.06	0.0	0.0	0.08	0.0	0.0	0.0	0.0	0.0	0.06	0.13	0.0
26	0.57	0.0	0.05	0.10	0.0	0.04	0.0	0.0	0.0	0.20	0.04	0.0
27	0.48	0.0	0.0	0.0	0.0	0.25	0.0	0.0	0.0	0.0	0.0	0.0
28	0.0	0.12	0.03	0.03	0.0	0.38	0.0	0.0	0.0	0.0	0.0	0.0
29	0.0	0.0	0.15	0.0	0.0	0.10	0.0	0.0	0.0	0.0	0.36	0.0
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.15	0.0	0.0	0.08	0.02
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.05
TOTAL	3.42	0.70	1.41	1.06	1.12	1.45	0.32	0.35	0.67	1.08	2.38	0.54
STA AV												

NOTES: Values are amounts from shielded recording gage 127507. STA AV do not apply to shielded rain gage records.

1970 MEAN DAILY DISCHARGE (cfs) REYNOLDS, IDAHO LOWER SHEEP CREEK WATERSHED (117066)												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7	0.0	0.0	0.0 T	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8	0.0	0.0	0.001	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	0.0	0.0	0.0 T	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0 T	0.001	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.002	0.001	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	0.0	0.0	0.001	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	0.0	0.0	0.002	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.002	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.001	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0 T	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	0.004	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	0.015	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MEAN	0.0006	0.0001	0.0003	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
INCHES	0.014	0.001	0.006	0.001	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
STA AV	0.098	0.009	0.116	0.008	0.0	0.002	0.0	0.0	0.0	0.0	0.0	0.0

NOTES: To convert CFS to IN/DAY, multiply by 0.721262. STA AV based on 4 yr (1967-70) record period.

CHICKASHA, OKLAHOMA WATERSHED 100 AT ANADARKO

LOCATION: Washita River above Anadarko, Okla.; Southwest Central Oklahoma and Texas Panhandle; in Caddo, Kiowa, Washita, Custer, Beckham, and Roger Mills Counties, Okla.; and Hemphill, Wheeler, and Gray Counties, Tex.; Washita River, Red River Basin. GAGING STATION--NW 1/4 sec. 15, T. 7 N., R. 10 W., lat. 35 deg. 05 min., long. 98 deg. 14 min.; North edge of Anadarko, Okla., 35 feet upstream from U.S. Highway 281 bridge over Washita River; at river mile 305.2, approximately 8.1 miles upstream from confluence of Sugar Creek.

AREA: 2339800.00 acres 3656.00 sq. miles

MONTHLY PRECIPITATION AND RUNOFF (inches)							CHICKASHA, OKLAHOMA			WATERSHED 100 AT ANADARKO				
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual	
1970	Q	0.033	0.027	0.033	0.052	0.073	0.044	0.005	0.031	0.012	0.010	0.011	0.013	0.344
	Q	0.044	0.042	0.048	0.061	0.147	0.144	0.054	0.044	0.103	0.087	0.090	0.049	0.914
ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS														
	Maximum Discharge		1 Hour		2 Hours		Maximum Volume for Selected Time Interval							
	Date	Rate	Date	Vol.	Date	Vol.	6 Hours		12 Hours		1 Day		2 Days	
							Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.
1970	5-31	0.001	5-31	0.001	5-31	0.001	5-31	0.004	5-31	0.007	5-31	0.014	5-30	0.024
													5-29	0.047
MAXIMUMS FOR PERIOD OF RECORD														
	9-23 1965	0.004	9-23 1965	0.004	9-23 1965	0.009	9-23 1965	0.026	9-23 1965	0.052	9-23 1965	0.100	9-23 1965	0.188
													9-23 1965	0.384

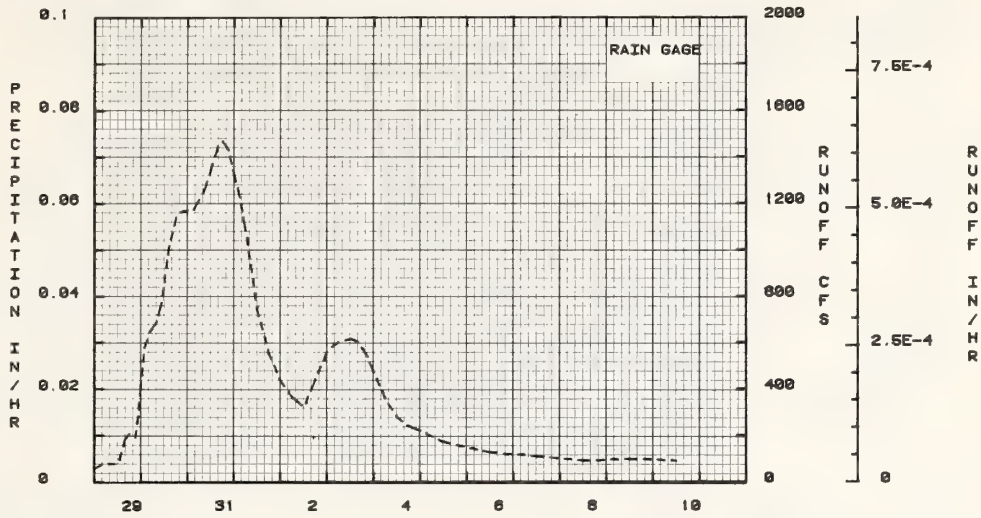
NOTES: Watershed conditions not applicable. For map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1965, USDA Misc. Pub. 1216, p. 69-7-21. Since this is the inflow station to a study reach, precipitation data are not applicable. Runoff records began Oct. 1961. For long-time precipitation records, see National Weather Service records at Chickasha, Okla.

1970 MEAN DAILY DISCHARGE (cfs)					CHICKASHA, OKLAHOMA WATERSHED 100 AT ANADARKO							
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	98.7	101.3	96.1	112.2	451.4	818.5	27.4	17.9	53.4	47.9	31.6	42.6
2	96.1	98.7	96.1	123.7	983.7	408.3	22.3	7.9	49.7	44.3	31.6	44.3
3	96.1	96.1	93.5	123.7	395.5	581.7	21.1	35.8	44.3	30.2	30.2	46.1
4	96.1	96.1	93.5	138.8	204.8	306.7	19.9	36.2	39.3	36.1	31.6	46.1
5	98.7	96.1	91.0	148.4	165.0	171.9	18.8	18.7	37.7	28.8	34.6	42.6
6	96.1	96.1	101.3	145.2	161.6	126.6	17.9	16.3	31.6	26.1	31.6	42.6
7	93.5	98.7	115.0	126.6	142.0	109.4	22.3	14.7	28.8	18.8	31.6	42.6
8	91.0	98.7	112.2	117.9	132.7	91.0	15.5	9.8	27.4	17.1	34.6	42.6
9	88.5	98.7	109.4	109.4	126.6	98.7	9.2	6.2	24.8	16.3	34.6	39.3
10	96.1	98.7	115.0	109.4	123.7	91.0	9.2	2.7	22.3	17.1	37.7	34.6
11	106.7	98.7	115.0	109.4	117.9	186.3	8.5	6.7	19.9	19.9	37.7	39.3
12	101.3	96.1	112.2	106.7	115.0	153.4	8.5	6.2	17.9	27.4	40.9	39.3
13	112.2	96.1	101.3	104.0	106.7	135.6	8.5	4.6	17.9	26.1	39.3	40.9
14	109.4	98.7	98.7	98.7	106.7	218.4	5.6	15.5	18.7	28.8	42.6	40.9
15	115.0	96.1	98.7	93.5	142.0	118.5	4.6	34.6	17.1	27.4	39.3	40.9
16	115.0	96.1	106.7	101.3	142.0	86.0	4.6	46.1	17.9	30.2	39.3	42.6
17	115.0	96.1	101.3	101.5	160.5	67.6	3.6	44.3	18.7	34.6	39.3	42.6
18	104.0	96.1	104.0	172.9	181.1	59.3	4.1	102.4	19.9	36.1	34.6	36.1
19	104.0	91.0	98.7	441.7	99.7	67.6	3.6	36.1	19.9	36.1	36.1	39.3
20	104.0	93.5	96.1	395.5	101.3	67.6	5.1	17.9	18.8	36.1	39.3	42.6
21	98.7	93.5	101.3	284.6	96.1	63.4	6.2	61.5	28.8	34.6	42.6	44.3
22	98.7	93.5	104.0	373.9	91.0	39.3	6.7	601.6	42.6	36.1	39.3	46.1
23	101.3	93.5	112.2	266.2	86.0	44.3	6.7	323.3	49.7	37.7	39.3	40.9
24	112.2	93.5	112.2	197.2	76.5	44.3	16.7	410.3	49.7	39.3	39.3	42.6
25	106.7	93.5	109.4	175.4	72.0	42.6	18.7	526.2	78.9	34.6	34.6	40.9
26	112.2	91.0	101.3	175.4	69.8	39.3	34.6	326.4	132.7	34.6	36.1	42.6
27	112.2	93.5	98.7	161.6	72.0	36.1	46.1	124.1	109.4	34.6	39.3	42.6
28	112.2	96.1	101.3	148.4	65.5	34.6	49.7	74.3	74.3	34.6	36.1	42.6
29	109.4		106.7	135.7	140.3	31.6	36.1	47.9	55.4	33.1	39.3	36.1
30	101.3		106.7	172.5	878.6	30.2	31.6	34.6	49.7	33.1	42.6	40.9
31	101.3		106.7		1324.1		30.2	51.5		33.1		39.3
MEAN	103.34	95.92	103.75	169.05	230.06	145.66	16.89	98.78	40.57	31.32	36.89	41.51
INCHES	0.033	0.027	0.033	0.052	0.073	0.044	0.005	0.031	0.012	0.010	0.011	0.013
STA AV	0.044	0.042	0.048	0.061	0.147	0.144	0.054	0.044	0.103	0.087	0.090	0.049

NOTES: For daily air temperatures in the vicinity, see table for Watershed W-700, (69.007) of this publication. To convert discharge in CFS to IN/DAY, multiply by 0.00001017. To convert discharge in inches to AC-FT, multiply by 194.983. STA AV based on 10 yr (1961-70) record period.

1970 SELECTED RUNOFF EVENT			CHICKASHA, OKLAHOMA WATERSHED 100 AT ANADARKO								
ANTECEDENT CONDITIONS			RAINFALL			RUNOFF					
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.	
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)	
EVENT OF MAY 29 - JUNE 10, 1970											
5-29		0.0					5-29	1	61.300	0.0	
								400	78.900	0.0001	
								730	81.200	0.0002	
								1030	81.200	0.0003	
								1300	98.700	0.0004	
WATERSHED CONDITIONS: Not applicable								1530	182.600	0.0005	
								1800	208.600	0.0007	
								2100	193.500	0.0010	
								2230	284.100	0.0012	
								2400	431.000	0.0014	
							5-30	200	589.698	0.0018	
								500	657.499	0.0026	
								800	692.898	0.0035	
								1030	774.099	0.0043	
								1430	1019.299	0.0058	
								1800	1141.198	0.0074	
								2100	1166.698	0.0089	
								2400	1170.999	0.0104	
							5-31	300	1175.300	0.0119	
								600	1217.999	0.0134	
								900	1269.098	0.0150	
								1200	1345.798	0.0167	
								1530	1447.800	0.0188	
								1800	1468.799	0.0203	
								2100	1430.499	0.0221	
								2400	1324.100	0.0239	
							6- 1	300	1226.098	0.0255	
								600	1081.198	0.0270	
								1200	743.898	0.0293	
								1800	557.000	0.0310	
								2400	436.500	0.0323	
							6- 2	600	366.300	0.0333	
								1100	331.100	0.0340	
								1300	341.000	0.0343	
								1800	442.198	0.0351	
								2400	563.500	0.0364	
							6- 3	600	602.798	0.0379	
								1200	616.298	0.0395	
								1600	602.798	0.0405	
								2100	538.000	0.0417	
								2400	471.100	0.0423	
							6- 4	600	361.100	0.0434	
								1200	279.500	0.0442	
								1800	240.600	0.0449	
								2400	220.400	0.0455	
							6- 5	1200	171.900	0.0472	
							6- 6	1200	126.600	0.0485	
							6- 7	1200	109.400	0.0496	
							6- 8	1200	91.000	0.0505	
							6- 9	1200	98.700	0.0515	
							6-10	1200	91.000	0.0524	

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.0000004239. No precipitation record is shown because all of the watershed lies outside of the area in which precipitation is measured.



EVENT OF MAY 29 - JUNE 10, 1970
 CHICKASHA, OKLAHOMA WATERSHED 100 AT ANADARKO

CHICKASHA, OKLAHOMA WATERSHED 200 AT VERDEN

LOCATION: Washita River above Verden, Okla.; Southwest Central Okla. and Texas Panhandle; in Caddo, Canadian, Kiowa, Washita, Custer, Beckham, and Roger Mills Counties, Okla.; and Hemphill, Wheeler, and Gray Counties, Tex.; Washita River; Red River Basin. GAGING STATION--SW1/4 sec. 7, T. 7 N., R. 8 W., lat. 35 deg. 05 min., long. 98 deg. 05 min.; North edge of Verden, Okla. at county road bridge over Washita River; at river mile 283.4, approximately 8.4 miles upstream from confluence with Ione Creek.

AREA: 2612500.00 acres 4082.00 sq. miles

MONTHLY PRECIPITATION AND RUNOFF (inches)														CHICKASHA, OKLAHOMA WATERSHED 200 AT VERDEN															
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual															
1970	P	0.10	0.22	2.61	2.99	3.82	2.45	1.63	1.08	3.99	1.32	0.41	0.28	20.90															
	Q	0.032	0.026	0.034	0.052	0.069	0.053	0.005	0.023	0.012	0.009	0.010	0.013	0.339															
STA AV	P	0.56	0.93	1.47	2.85	3.73	3.55	1.78	2.66	4.67	1.51	1.76	0.92	26.39															
	Q	0.048	0.044	0.048	0.061	0.142	0.145	0.052	0.040	0.098	0.086	0.088	0.051	0.903															
ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																													
		Maximum Discharge		1 Hour		2 Hours		6 Hours		12 Hours		1 Day		2 Days		8 Days													
		Date	Rate	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.												
1970		6- 1	0.001	6- 1	0.001	6- 1	0.001	6- 1	0.004	5-31	0.007	5-31	0.012	5-30	0.021	5-29	0.048												
MAXIMUMS FOR PERIOD OF RECORD																													
		5- 6	0.002	5- 7	0.002	9-24	0.005	9-24	0.014	9-24	0.028	9-23	0.055	9-23	0.108	9-21	0.344												
		1969		1969		1965		1965		1965		1965		1965		1965													

NOTES: Watershed conditions: For area not included above subwatersheds as determined from a 1967 survey; sowed crop - 24%; row crop - 5%; alfalfa - 7%; pasture and range - 49%; and miscellaneous - 15%. For map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1965, USDA Misc. Pub. 1216, p. 69.7-21. Precipitation data obtained from a Thiessen weighted average of 66 rain gages for the reach between stations at Anadarko and Verden. Precipitation records began Oct. 1961; runoff records began Sept. 1961. For long-time precipitation records, see National Weather Service records at Chickasha, Okla.

1970 DAILY PRECIPITATION (inches)														CHICKASHA, OKLAHOMA WATERSHED 200 AT VERDEN														
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec																
1	0.0	0.0	0.0	0.43	0.0	0.06	0.0	0.0	0.0	0.01	0.10	0.0																
2	0.0	0.01	0.0	0.0	0.0	0.01	0.0	0.0	0.03	0.0	0.0	0.0																
3	0.0	0.0	0.0	0.0	0.0	0.28	0.0	0.0	0.05	0.0	0.0	0.0																
4	0.0	0.0	0.0	0.20	0.0	0.10	0.01	0.0	0.0	0.0	0.0	0.0																
5	0.0	0.0	0.18	0.0	0.0	0.0	0.0	0.0	0.0	0.55	0.0	0.0																
6	0.0	0.0	0.87	0.0	0.0	0.0	0.01	0.0	0.0	0.0	0.0	0.0																
7	0.0	0.0	0.01	0.0	0.0	0.0	0.0	0.0	0.02	0.0	0.0	0.0																
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.23	0.40	0.0	0.0																
9	0.0	0.0	0.0	0.0	0.0	0.0	0.07	0.01	0.0	0.0	0.0	0.0																
10	0.0	0.0	0.0	0.0	0.0	0.0	0.02	0.0	0.0	0.0	0.0	0.0																
11	0.0	0.0	0.0	0.0	0.0	1.05	0.40	0.0	0.0	0.0	0.0	0.0																
12	0.0	0.0	0.02	0.0	0.0	0.0	0.09	0.0	0.0	0.0	0.0	0.0																
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.49	0.0	0.31	0.0																
14	0.0	0.0	0.0	0.0	0.90	0.0	0.0	0.0	0.09	0.0	0.0	0.0																
15	0.0	0.0	0.0	0.0	0.04	0.0	0.11	0.0	0.0	0.01	0.0	0.22																
16	0.0	0.0	0.49	0.65	0.0	0.0	0.0	0.0	0.18	0.10	0.0	0.0																
17	0.09	0.0	0.0	0.02	0.0	0.0	0.0	0.0	0.01	0.25	0.0	0.0																
18	0.01	0.0	0.04	0.01	0.0	0.0	0.0	0.0	0.22	0.0	0.0	0.0																
19	0.0	0.0	0.15	0.0	0.0	0.0	0.01	0.13	0.0	0.0	0.0	0.0																
20	0.0	0.0	0.0	0.0	0.0	0.76	0.32	0.24	0.0	0.0	0.0	0.03																
21	0.0	0.0	0.04	0.0	0.0	0.0	0.0	0.04	0.02	0.0	0.0	0.0																
22	0.0	0.10	0.0	0.0	0.0	0.0	0.0	0.24	2.83	0.0	0.0	0.0																
23	0.0	0.01	0.0	0.0	0.02	0.0	0.0	0.0	0.02	0.0	0.0	0.0																
24	0.0	0.03	0.0	0.0	0.01	0.13	0.0	0.0	0.0	0.0	0.0	0.0																
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.01	0.0	0.0	0.0																
26	0.0	0.0	0.0	0.04	0.0	0.06	0.0	0.0	0.01	0.0	0.0	0.0																
27	0.0	0.02	0.0	0.0	0.04	0.0	0.18	0.0	0.0	0.0	0.0	0.0																
28	0.0	0.05	0.53	0.0	0.21	0.0	0.33	0.0	0.0	0.0	0.0	0.0																
29	0.0		0.0	0.45	2.06	0.0	0.0	0.0	0.0	0.0	0.0	0.0																
30	0.0		0.17	1.19	0.0	0.0	0.0	0.20	0.0	0.0	0.0	0.0																
31	0.0		0.11		0.54		0.08	0.0		0.0		0.0																
TOTAL	0.10	0.22	2.61	2.99	3.82	2.45	1.63	1.08	3.99	1.32	0.41	0.28																
STA AV	0.56	0.93	1.47	2.85	3.73	3.55	1.78	2.66	4.67	1.51	1.76	0.92																

NOTES: For daily air temperatures in the vicinity, see table for Watershed W-700, (69.007) of this publication. Daily precipitation values Thiessen weighted average of 66 rain gages on the watershed. STA AV based on 10 yr (1961-70) record period.

1970 MEAN DAILY DISCHARGE (cfs) CHICKASHA, OKLAHOMA WATERSHED 200 AT VERDEN												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	114.6	104.6	107.0	151.6	365.4	1226.1	32.0	26.8	53.1	52.2	30.7	41.5
2	117.2	107.0	105.8	178.1	861.3	502.6	30.0	18.3	52.2	49.6	32.0	42.3
3	114.6	103.4	103.4	153.3	638.1	587.2	26.2	9.0	45.5	43.9	32.7	43.9
4	114.6	103.4	102.1	148.9	323.2	473.5	24.4	26.6	38.5	32.0	31.4	44.7
5	104.6	102.1	103.4	177.9	209.7	281.6	23.2	30.3	34.8	42.3	29.4	45.5
6	102.1	102.1	132.0	177.9	174.7	210.9	22.1	17.7	34.1	37.0	31.4	48.8
7	98.5	103.4	154.8	170.0	160.8	158.6	20.4	12.6	30.0	28.1	32.0	48.0
8	95.0	103.4	141.7	159.3	151.8	127.6	20.9	10.5	28.7	25.0	31.4	48.0
9	92.7	102.1	125.1	147.4	151.8	105.8	19.3	8.7	30.0	22.1	32.7	47.1
10	95.0	100.9	121.1	143.1	147.4	107.0	13.0	3.6	26.8	20.4	32.0	45.5
11	98.5	98.5	129.1	138.8	138.8	177.1	10.9	2.2	27.4	21.5	32.0	47.1
12	98.5	98.5	123.7	133.2	126.4	361.1	10.1	3.2	25.0	23.2	32.7	57.6
13	110.8	98.5	117.2	123.7	118.5	165.5	8.7	4.6	26.8	26.8	37.0	56.6
14	130.5	98.5	109.5	119.8	112.2	229.4	8.0	2.2	28.7	26.8	37.7	55.7
15	130.5	99.7	107.0	114.6	200.4	185.1	6.3	9.0	21.5	28.7	37.7	53.1
16	134.6	99.7	110.8	110.8	169.4	108.7	4.6	27.2	19.8	30.7	37.7	50.5
17	137.4	98.5	127.8	172.7	132.7	80.6	3.4	35.9	22.6	40.8	37.7	48.8
18	104.6	100.9	123.7	202.8	214.0	66.0	3.6	44.3	22.1	43.9	37.7	47.1
19	98.5	97.3	127.8	288.4	152.1	56.6	3.9	76.1	21.5	42.3	36.3	42.3
20	92.7	95.0	121.1	394.3	102.1	66.5	5.2	31.5	21.5	40.8	37.0	42.3
21	92.7	96.2	119.8	305.3	107.0	125.5	7.3	28.7	19.8	37.7	38.5	46.3
22	95.0	99.7	121.1	314.0	95.0	78.6	7.3	254.9	37.5	35.5	41.5	47.1
23	104.6	100.9	119.8	294.0	93.8	50.5	6.0	370.3	119.5	35.5	38.5	48.8
24	117.2	102.1	122.4	227.0	88.1	55.7	5.7	259.0	61.5	34.8	38.5	45.5
25	150.3	100.9	119.8	185.9	80.4	54.0	11.3	407.2	54.9	34.1	39.2	45.5
26	126.4	99.7	114.6	170.0	76.2	51.3	16.3	372.4	101.0	32.0	37.7	46.3
27	126.4	98.5	112.1	168.4	75.1	47.1	25.6	184.8	123.7	30.7	38.5	47.1
28	125.1	105.8	121.1	163.8	76.2	44.7	49.1	106.5	97.3	30.0	39.2	48.0
29	121.1	126.4	154.8	604.4	40.0	49.6	49.6	72.5	73.1	30.7	39.2	48.0
30	114.6	127.8	318.8	543.8	34.8	37.0	37.0	51.3	59.4	30.7	39.2	44.7
31	108.3		138.8		1092.0		32.0	41.5		30.0		47.1
MEAN	111.84	100.76	120.57	190.29	244.61	195.33	17.53	82.24	45.28	33.54	35.64	47.44
INCHES	0.032	0.026	0.034	0.052	0.069	0.053	0.005	0.023	0.012	0.009	0.010	0.013
STA AV	0.048	0.044	0.048	0.061	0.142	0.145	0.052	0.040	0.098	0.086	0.088	0.051

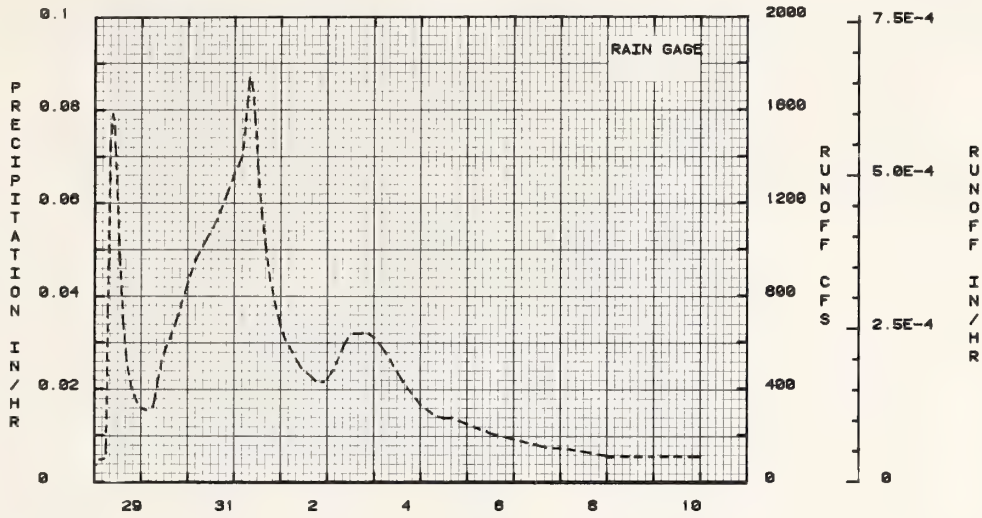
NOTES: To convert mean daily discharge in CFS to IN/DAY, multiply by 0.000009111. To convert discharge in inches to AC-FT, multiply by 217,708. STA AV based on 10 yr (1961-70) record period.

1970			SELECTED RUNOFF EVENT				CHICKASHA, OKLAHOMA		WATERSHED 200 AT VERDEN			
ANTECEDENT CONDITIONS			RAINFALL				RUNOFF					
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.		
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)		
EVENT OF MAY 29 - JUNE 10, 1970												
5-29		0.0					5-29	1	74.100	0.0		
								42	74.800	0.0		
								236	98.000	0.0001		
								500	101.600	0.0002		
								548	125.800	0.0002		
WATERSHED CONDITIONS: For area not included above subwatersheds as determined from a 1967 survey; sowed crop - 24%; row crop - 5%; alfalfa - 7%; pasture and range - 49%; and miscel- laneous - 15%.								600	183.900	0.0002		
								618	308.698	0.0002		
								624	464.698	0.0002		
								636	589.300	0.0002		
								648	764.799	0.0003		
								700	929.099	0.0004		
								718	1110.398	0.0005		
								736	1305.898	0.0006		
								800	1471.599	0.0008		
								824	1510.398	0.0010		
							900	1586.299	0.0014			
							930	1560.599	0.0017			
							1000	1523.998	0.0020			
							1030	1435.998	0.0023			
							1130	1244.600	0.0028			
							1230	1049.300	0.0032			
							1300	934.100	0.0034			
							1348	807.398	0.0037			
							1454	658.398	0.0040			
							1630	522.100	0.0044			
							1900	400.398	0.0048			
							2200	342.000	0.0052			
							2400	317.800	0.0055			
							5-30	230	308.898	0.0058		
								600	326.000	0.0062		
								730	380.698	0.0064		
								900	460.100	0.0066		
								1030	523.300	0.0069		
								1200	561.600	0.0072		
								1800	695.898	0.0086		

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.0000003796. No precipitation record is shown because most of the watershed lies outside of the area in which precipitation is measured.

1970	SELECTED RUNOFF EVENT			CHICKASHA, OKLAHOMA			WATERSHED 200 AT VEEDEN			
ANTECEDENT CONDITIONS			RAINFALL			RUNOFF				
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)
EVENT OF MAY 29 - JUNE 10, 1970 (CONTINUED)										
							5-30	2400	861.898	0.0104
							5-31	412	963.500	0.0119
								912	1040.799	0.0138
								1500	1131.298	0.0162
								2000	1238.698	0.0184
								2400	1331.198	0.0204
							6- 1	400	1404.598	0.0225
								630	1628.198	0.0239
								730	1737.998	0.0245
								830	1718.099	0.0252
								930	1681.998	0.0258
								1030	1565.299	0.0264
								1200	1357.498	0.0272
								1400	1160.198	0.0282
								1600	1019.098	0.0290
								1830	865.198	0.0299
								2130	745.398	0.0308
								2400	668.898	0.0315
							6- 2	230	608.800	0.0321
								1042	488.198	0.0338
								1800	435.800	0.0351
								2100	429.100	0.0356
								2206	427.898	0.0358
								2400	441.800	0.0361
							6- 3	300	481.500	0.0366
								800	580.500	0.0376
								1030	616.398	0.0382
								1330	638.198	0.0389
								1800	640.198	0.0400
								2100	636.398	0.0407
								2400	619.898	0.0414
							6- 4	624	550.000	0.0428
								1454	429.300	0.0444
								2400	330.600	0.0457
							6- 5	600	293.398	0.0464
								1200	271.898	0.0470
								1630	275.800	0.0475
								2400	246.700	0.0482
							6- 6	1200	207.300	0.0492
								2400	182.400	0.0501
								1630	147.200	0.0511
								2400	143.000	0.0515
							6- 8	1200	129.000	0.0521
								2400	109.500	0.0526
							6- 9	1200	105.800	0.0531
								2400	106.400	0.0536
							6-10	1200	107.000	0.0546

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.0000003796. No precipitation record is shown because most of the watershed lies outside of the area in which precipitation is measured.



EVENT OF MAY 29 - JUNE 10, 1970
 CHICKASHA, OKLAHOMA WATERSHED 200 AT VERDEN

CHICKASHA, OKLAHOMA WATERSHED 500 NEAR CHICKASHA

LOCATION: Washita River Watershed above Chickasha, Okla.; Southwest Central Oklahoma and Texas Panhandle; in Grady, Caddo, Canadian, Kiowa, Washita, Custer, Beckham, and Roger Mills Counties, Okla.; and Hemphill, Wheeler, and Gray Counties, Tex.; Washita River, Red River Basin. GAGING STATION--SE1/4 sec. 23, T. 7 N., R. 7 W., lat. 35 deg. 05 min.; long. 97 deg. 54 min., 1 mile Northeast of Chickasha, Okla., at H.E. Bailey Turnpike bridge over Washita River; at river mile 256.5, approximately 1.3 miles downstream from confluence of Line Creek.

AREA: 2768000.00 acres 4325.00 sq. miles

MONTHLY PRECIPITATION AND RUNOFF (inches)														CHICKASHA, OKLAHOMA WATERSHED 500 NEAR CHICKASHA															
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual															
1970	P	0.10	0.38	2.51	4.34	4.65	2.13	1.29	1.33	4.30	2.11	0.62	0.27	24.03															
	Q	0.026	0.025	0.032	0.063	0.101	0.067	0.004	0.023	0.013	0.012	0.009	0.013	0.389															
STA AV	P	0.69	1.05	1.52	3.04	3.60	3.10	1.68	2.88	3.89	1.52	2.04	0.83	25.83															
	Q	0.039	0.036	0.042	0.069	0.160	0.103	0.045	0.040	0.080	0.077	0.070	0.044	0.802															
ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																													
		Maximum Discharge		1 Hour		2 Hours		Maximum Volume for Selected Time Interval		6 Hours		12 Hours		1 Day		2 Days		8 Days											
		Date	Rate	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.										
1970		5-29	0.002	5-29	0.002	5-29	0.004	5-29	0.012	5-29	0.022	5-29	0.032	5-29	0.039	5-29	0.077												
MAXIMUMS FOR PERIOD OF RECORD																													
		4-12	0.003	5-29	0.002	4-12	0.005	4-12	0.015	5- 7	0.029	5- 6	0.055	5- 6	0.102	5- 5	0.329												
		1967		1970		1967		1967		1969		1969		1969		1969													

NOTES: Watershed conditions: For area not included above subwatersheds as determined from a 1967 survey; sowed crop -33%; row crop - 4%; alfalfa - 7%; pasture and range - 45%; and miscellaneous - 11%. For map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1965, USDA Misc. Pub. 1216, p. 69.7-21, (Composite). The station at Chickasha (4th St.) Watershed 400 was discontinued in 1967, therefore, causing a new Thiessen weighted average for this watershed. Precipitation data obtained from a Thiessen weighted average of 42 gages for the reach between Verden (200) and Chickasha (500). Precipitation records began Oct. 1961; runoff records began Jan. 1964. For long-time precipitation records, see National Weather Service records at Chickasha, Okla.

1970		DAILY PRECIPITATION (inches)					CHICKASHA, OKLAHOMA				WATERSHED 500 NEAR CHICKASHA			
	Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
	1	0.0	0.0	0.0	0.27	0.0	0.15	0.0	0.01	0.0	0.02	0.16	0.0	
	2	0.0	0.0	0.0	0.0	0.0	0.02	0.0	0.0	0.02	0.0	0.0	0.0	
	3	0.0	0.0	0.0	0.0	0.0	0.34	0.01	0.0	0.10	0.0	0.0	0.0	
	4	0.0	0.0	0.0	0.23	0.0	0.15	0.0	0.0	0.0	0.0	0.0	0.0	
	5	0.0	0.0	0.08	0.0	0.0	0.0	0.0	0.0	0.0	1.20	0.0	0.0	
	6	0.0	0.0	0.92	0.0	0.0	0.0	0.06	0.0	0.0	0.0	0.0	0.0	
	7	0.0	0.0	0.02	0.0	0.0	0.0	0.0	0.0	0.02	0.02	0.0	0.0	
	8	0.0	0.01	0.0	0.0	0.0	0.0	0.0	0.0	0.16	0.54	0.0	0.0	
	9	0.0	0.0	0.0	0.01	0.0	0.0	0.05	0.06	0.0	0.0	0.0	0.0	
	10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	11	0.0	0.0	0.0	0.0	0.0	0.84	0.12	0.0	0.01	0.0	0.0	0.0	
	12	0.0	0.0	0.01	0.0	0.0	0.0	0.34	0.0	0.0	0.0	0.0	0.0	
	13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.50	0.0	0.46	0.0	
	14	0.0	0.0	0.0	0.0	1.63	0.0	0.0	0.0	0.08	0.0	0.0	0.0	
	15	0.0	0.0	0.0	0.0	0.08	0.0	0.02	0.0	0.0	0.0	0.0	0.20	
	16	0.0	0.0	0.50	0.40	0.0	0.0	0.0	0.0	0.30	0.05	0.0	0.0	
	17	0.09	0.0	0.0	0.03	0.0	0.0	0.0	0.0	0.03	0.22	0.0	0.0	
	18	0.01	0.0	0.02	0.03	0.0	0.0	0.0	0.81	0.0	0.0	0.0	0.0	
	19	0.0	0.0	0.14	0.0	0.0	0.0	0.0	0.33	0.0	0.0	0.0	0.0	
	20	0.0	0.0	0.0	0.0	0.0	0.47	0.23	0.05	0.0	0.0	0.0	0.02	
	21	0.0	0.0	0.08	0.0	0.0	0.0	0.0	0.02	0.01	0.0	0.0	0.05	
	22	0.0	0.12	0.0	0.0	0.0	0.0	0.0	0.05	3.00	0.03	0.0	0.0	
	23	0.0	0.0	0.0	0.0	0.02	0.0	0.0	0.0	0.03	0.03	0.0	0.0	
	24	0.0	0.05	0.0	0.0	0.01	0.16	0.0	0.0	0.0	0.0	0.0	0.0	
	25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	26	0.0	0.0	0.0	0.16	0.0	0.0	0.0	0.0	0.04	0.0	0.0	0.0	
	27	0.0	0.03	0.0	0.0	0.05	0.0	0.10	0.0	0.0	0.0	0.0	0.0	
	28	0.0	0.13	0.60	0.0	0.14	0.0	0.36	0.0	0.0	0.0	0.0	0.0	
	29	0.0	0.0	0.0	1.74	2.71	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	30	0.0	0.10	0.10	1.47	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	31	0.0	0.0	0.04	0.0	0.01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
TOTAL		0.10	0.38	2.51	4.34	4.65	2.13	1.29	1.33	4.30	2.11	0.62	0.27	
STA AV		0.69	1.05	1.52	3.04	3.60	3.10	1.68	2.88	3.89	1.52	2.04	0.83	

NOTES: For daily air temperatures in the vicinity, see table for Watershed W-700, (69.007) of this publication. Daily precipitation values Thiessen weighted average of 42 rain gages on the watershed. STA AV based on 10 yr (1961-70) record period.

1970		MEAN DAILY DISCHARGE (cfs)					CHICKASHA, OKLAHOMA		WATERSHED 500 NEAR CHICKASHA			
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	95.1	105.1	102.8	133.4	631.7	1289.2	33.8	17.3	34.5	55.6	31.2	40.7
2	94.1	103.9	108.5	146.0	573.5	790.0	31.9	19.8	47.5	50.6	31.9	42.2
3	91.9	101.7	105.1	160.4	749.1	535.5	30.6	16.4	45.9	45.2	31.9	42.9
4	90.9	100.6	101.7	148.6	422.8	652.7	27.6	7.7	40.0	41.5	31.9	43.7
5	89.8	99.5	94.1	146.0	265.0	408.4	24.1	7.6	33.8	48.1	30.6	44.4
6	88.7	99.5	124.9	163.1	209.3	266.7	22.4	28.6	31.9	219.2	31.2	43.7
7	87.7	100.6	142.2	161.8	190.8	19.8	19.8	14.6	30.6	65.3	31.9	47.5
8	81.5	100.6	155.1	148.6	174.0	161.8	17.8	8.4	24.1	54.6	33.2	50.6
9	80.5	101.7	144.8	146.0	164.5	138.4	18.3	5.9	21.4	94.2	32.5	49.8
10	89.8	100.6	129.7	128.5	155.1	121.3	21.9	5.3	19.3	36.1	33.2	49.0
11	94.1	100.6	124.9	121.3	147.3	126.4	14.1	3.4	17.3	25.8	33.8	46.7
12	93.0	100.6	131.0	122.5	138.4	1097.4	15.2	1.5	17.3	24.1	33.2	46.7
13	97.3	100.6	128.5	120.1	129.7	363.7	12.1	0.6	17.2	23.0	36.5	57.2
14	101.7	101.7	122.5	114.2	144.1	197.2	8.4	0.3	20.8	25.2	38.6	59.8
15	115.4	100.6	116.6	110.8	717.5	251.6	6.8	0.2	20.6	25.8	37.2	61.6
16	105.1	101.7	116.6	111.9	246.7	169.4	5.3	0.2	23.4	27.0	37.2	59.8
17	103.9	102.8	118.9	114.2	163.8	117.7	3.4	8.9	21.9	30.6	37.2	56.4
18	91.9	101.7	116.6	163.7	134.4	95.1	2.4	21.9	20.8	35.8	36.5	52.3
19	95.1	103.9	116.6	181.3	198.3	82.5	1.4	64.3	20.3	40.7	36.5	51.4
20	93.0	103.9	117.7	333.6	137.1	77.3	2.0	82.3	19.8	40.7	35.8	46.7
21	93.0	101.7	120.1	371.5	106.2	96.6	2.4	33.8	18.8	38.6	35.2	45.9
22	82.5	101.7	120.1	277.1	107.3	119.8	2.2	19.3	91.0	39.3	35.8	49.8
23	106.2	103.9	120.1	323.3	99.5	78.5	2.8	377.1	261.4	37.9	37.9	50.6
24	111.9	102.8	120.1	269.0	97.3	55.1	2.8	315.3	153.7	35.2	36.5	52.3
25	131.0	103.9	120.1	215.3	91.9	56.0	2.6	362.4	71.3	36.5	37.2	50.6
26	117.7	105.1	115.4	196.0	85.6	53.4	3.2	533.7	46.7	36.5	40.0	50.6
27	109.6	103.9	110.8	185.0	84.6	46.7	8.0	367.6	96.9	32.5	39.3	51.4
28	111.9	106.2	120.1	169.9	82.5	41.2	11.3	157.9	111.9	29.4	37.9	51.4
29	110.8		122.5	161.1	3423.9	41.2	34.8	93.1	89.6	29.4	39.3	51.4
30	108.5		126.1	2189.9	956.4	38.1	38.6	62.5	67.0	30.6	40.7	52.3
31	108.5		127.3		969.7		26.4	49.0		31.2		49.0
MEAN	99.10	102.18	120.69	244.47	380.57	258.91	14.66	86.67	51.22	44.71	35.39	49.95
INCHES	0.026	0.025	0.032	0.063	0.101	0.067	0.004	0.023	0.013	0.012	0.009	0.013
STA AV	0.039	0.036	0.042	0.069	0.160	0.100	0.045	0.040	0.080	0.077	0.070	0.044

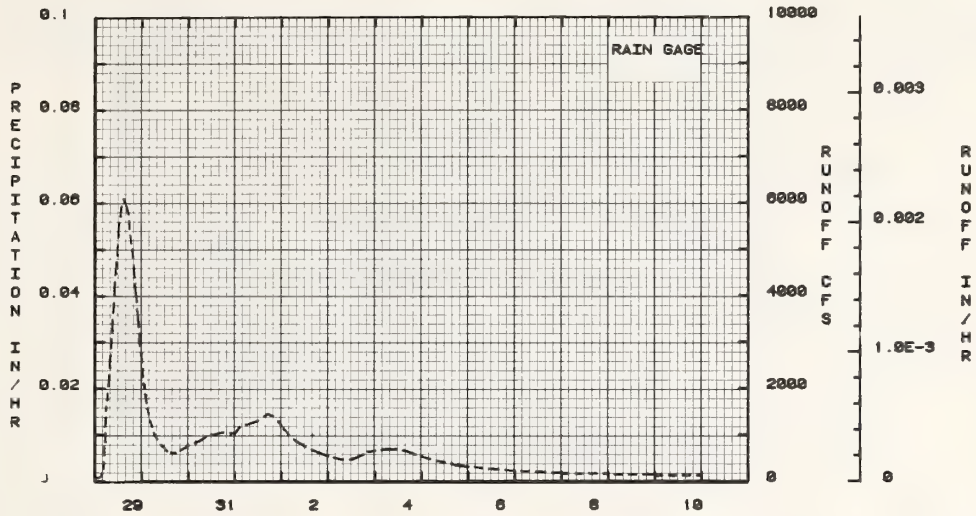
NOTES: To convert mean daily discharge in CFS to IN/DAY, multiply by 0.000008599. To convert discharge in inches to AC-FT, multiply by 230,667. STA AV based on 7 yr (1964-70) record period.

1970		SELECTED RUNOFF EVENT				CHICKASHA, OKLAHOMA		WATERSHED 500 NEAR CHICKASHA			
ANTECEDENT CONDITIONS		RAINFALL				Date		RUNOFF			
Date	Rainfall	Date	Time	Intensity	Acc.	Date	Time	Date	Rate	Acc.	
Mo-Day	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	Mo-Day	(cfs)	(inches)	
EVENT OF MAY 29 - JUNE 10, 1970											
5-29	0.0					5-29	1		82.500	0.0	
							206		86.800	0.0001	
							300		124.500	0.0001	
							342		193.700	0.0001	
							418		285.500	0.0002	
WATERSHED CONDITIONS: For area not included above subwatersheds as determined from a 1967 survey; sowed crop - 33%; row crop - 4%; alfalfa - 7%; pasture and range - 45%; and miscel- laneous - 11%.											
							430		425.398	0.0002	
							442		581.500	0.0002	
							448		748.600	0.0002	
							500		862.100	0.0003	
							512		1052.798	0.0004	
							518		1232.098	0.0004	
							530		1385.398	0.0005	
							536		1545.198	0.0006	
							548		1628.498	0.0007	
							606		1758.898	0.0009	
							624		1904.698	0.0011	
							648		2069.698	0.0014	
							712		2308.599	0.0017	
							730		2574.498	0.0020	
							748		2739.998	0.0023	
							812		2925.198	0.0027	
							836		3227.300	0.0031	
							854		3493.499	0.0035	
							918		3709.798	0.0040	
							942		4034.198	0.0046	
							1000		4310.086	0.0050	
							1024		4520.984	0.0056	
							1048		4735.984	0.0063	
							1118		4968.484	0.0072	
							1148		5325.184	0.0081	
							1212		5575.785	0.0089	
							1248		5785.484	0.0101	
							1324		5949.184	0.0114	
							1424		6097.984	0.0136	
							1500		6022.086	0.0149	

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.000003583. No precipitation record is shown because most of the watershed lies outside of the area in which precipitation is measured.

1970	SELECTED RUNOFF EVENT			CHICKASHA, OKLAHOMA			WATERSHED 500 NEAR CHICKASHA			
ANTECEDENT CONDITIONS			RAINFALL			RUNOFF				
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)
EVENT OF MAY 29 - JUNE 10, 1970 (CONTINUED)										
							5-29	1600	5941.285	0.0170
								1700	5753.684	0.0191
								1724	5442.586	0.0199
								1830	5135.785	0.0220
								1924	4812.184	0.0236
								2000	4406.883	0.0246
								2036	4170.586	0.0255
								2112	3880.100	0.0264
								2142	3602.398	0.0271
								2212	3335.300	0.0277
								2236	3056.498	0.0282
								2300	2922.198	0.0286
								2330	2778.198	0.0291
								2400	2572.698	0.0296
							5-30	30	2257.600	0.0300
								48	2102.698	0.0302
								118	2028.698	0.0306
								148	1859.398	0.0309
								218	1693.198	0.0312
								248	1576.898	0.0315
								330	1449.398	0.0319
								412	1318.299	0.0322
								512	1182.498	0.0326
								618	1041.398	0.0330
								748	913.798	0.0335
								1000	780.898	0.0342
								1300	656.800	0.0350
								1500	612.800	0.0355
								1730	625.000	0.0361
								1948	682.698	0.0366
								2400	779.799	0.0377
							5-31	600	886.198	0.0395
								906	972.999	0.0405
								1200	1012.698	0.0415
								1800	1064.598	0.0437
								2400	1029.100	0.0460
							6- 1	224	1169.500	0.0469
								600	1224.000	0.0484
								1200	1315.398	0.0511
								1700	1454.898	0.0536
								1930	1400.398	0.0549
								2212	1294.398	0.0562
								2400	1199.198	0.0570
							6- 2	100	1147.099	0.0574
								342	1006.198	0.0584
								718	874.698	0.0596
								1218	745.898	0.0611
								1830	624.000	0.0626
								2400	538.398	0.0637
							6- 3	300	507.600	0.0643
								730	467.600	0.0651
								1200	473.698	0.0659
								1800	582.100	0.0670
								2030	641.698	0.0675
								2400	658.100	0.0683
							6- 4	430	692.698	0.0694
								1100	697.398	0.0710
								1600	653.898	0.0722
								2100	575.198	0.0733
								2400	530.000	0.0739
							6- 5	430	478.000	0.0747
								1200	402.500	0.0759
								1800	347.000	0.0767
								2400	313.898	0.0774
							6- 6	1200	265.100	0.0786
								2400	222.800	0.0796
							6- 7	1200	197.700	0.0805
								2400	175.200	0.0813
							6- 8	1200	161.800	0.0820
							6- 9	1200	138.400	0.0832
							6-10	1200	121.300	0.0843

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.0000003583. No precipitation record is shown because most of the watershed lies outside of the area in which precipitation is measured.



EVENT OF MAY 29 - JUNE 10, 1970
CHICKASAW, OKLAHOMA WATERSHED 500 NEAR CHICKASAW

CHICKASHA, OKLAHOMA WATERSHED 600 NEAR TABLER

LOCATION: Washita River Watershed above Tabler, Okla.; Southwest Central Oklahoma and Texas Panhandle; in Grady, Caddo, Canadian, Kiowa, Washita, Custer, Beckham, and Roger Mills Counties, Okla.; and Beaufill, Wheeler, and Gray Counties, Tex.; Washita River, Red River Basin. GAGING STATION--NW1/4 sec. 23, T. 6 N., R. 6 W., lat. 34 deg. 59 min., long. 97 deg. 48 min. A cableway (no bridge) over the river about 4-1/2 miles south and 1 mile east of Tabler; at river mile 236.1, approximately 7.8 miles downstream from the confluence of the Little Washita River.

AREA: 3011800.00 acres 4706.00 sq. miles

MONTHLY PRECIPITATION AND RUNOFF (inches)														CHICKASHA, OKLAHOMA WATERSHED 600 NEAR TABLER	
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual	
1970	P	0.10	0.61	2.65	2.85	2.49	1.74	1.25	1.12	6.20	2.03	0.82	0.29	22.15	
	Q	0.030	0.027	0.035	0.065	0.112	0.067	0.003	0.018	0.034	0.016	0.011	0.015	0.435	
STA AV	P	1.00	1.29	1.77	2.85	4.16	2.14	1.70	3.19	4.25	1.71	1.78	0.80	26.65	
	Q	0.042	0.037	0.047	0.076	0.167	0.103	0.041	0.037	0.077	0.069	0.066	0.042	0.804	
ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS															
		Maximum Discharge		1 Hour		2 Hours		Maximum Volume for Selected Time Interval							
		Date	Rate	Date	Vol.	Date	Vol.	6 Hours	12 Hours	1 Day	2 Days	8 Days			
		Date	Rate	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Date	Vol.	Date
1970		5-29	0.002	5-29	0.002	5-29	0.004	5-29	0.010	5-29	0.020	5-29	0.033	5-29	0.041
															0.078
MAXIMUMS FOR PERIOD OF RECORD															
		5-7	0.003	5-7	0.003	5-7	0.007	5-7	0.019	5-7	0.036	5-6	0.066	5-6	0.113
		1969		1969		1969		1969		1969		1969		1969	0.336

NOTES: Watershed conditions: For area not included above subwatersheds as determined from a 1967 survey; sowed crop -20%; row crop - 6%; alfalfa - 12%; pasture and range - 52%; and miscellaneous - 10%. For maps of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1962, USDA Misc. Pub. 1070, p. 69.7-9 (Geologic); 1965, USDA Misc. Pub. 1216, p.69.7-21 (Composite). Precipitation records began Oct. 1961; Runoff records began July 1963. STA AV (P) based on a Thiessen weighted average of 66 gages for the reach between stations at Chickasha (Turnpike) and Tabler, Okla., for record period of Jan. 1964 to Dec. 1970. For long-time precipitation records, see National Weather Service records at Chickasha, Okla.

1970 DAILY PRECIPITATION (inches)														CHICKASHA, OKLAHOMA WATERSHED 600 NEAR TABLER	
	Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
1	0.0	0.0	0.0	0.0	0.17	0.0	0.10	0.0	0.0	0.02	0.01	0.13	0.0		
2	0.0	0.0	0.0	0.0	0.0	0.0	0.02	0.0	0.0	0.03	0.0	0.0	0.0		
3	0.0	0.0	0.0	0.0	0.0	0.0	0.47	0.0	0.0	0.02	0.0	0.0	0.0		
4	0.0	0.0	0.0	0.0	0.25	0.0	0.17	0.0	0.0	0.0	0.0	0.0	0.0		
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.74	0.0	0.0		
6	0.0	0.0	1.10	0.0	0.0	0.0	0.0	0.05	0.0	0.0	0.0	0.0	0.0		
7	0.0	0.0	0.14	0.0	0.0	0.0	0.0	0.0	0.0	0.08	0.10	0.0	0.0		
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.01	0.44	0.0	0.0		
9	0.0	0.0	0.0	0.0	0.01	0.0	0.0	0.10	0.01	0.0	0.0	0.0	0.0		
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.01	0.0	0.0	0.0		
11	0.0	0.0	0.0	0.0	0.0	0.0	0.05	0.14	0.0	0.01	0.0	0.0	0.0		
12	0.0	0.0	0.02	0.0	0.0	0.0	0.0	0.40	0.0	0.0	0.0	0.0	0.0		
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.63	0.0	0.68	0.0		
14	0.0	0.0	0.0	0.0	0.0	1.22	0.0	0.0	0.0	0.18	0.0	0.01	0.0		
15	0.0	0.0	0.0	0.0	0.0	0.11	0.0	0.0	0.0	0.0	0.04	0.0	0.20		
16	0.0	0.0	0.58	0.40	0.0	0.0	0.0	0.0	0.0	0.56	0.06	0.0	0.0		
17	0.09	0.0	0.0	0.01	0.0	0.0	0.0	0.0	0.0	0.36	0.20	0.0	0.0		
18	0.01	0.0	0.01	0.07	0.0	0.0	0.0	0.0	0.36	0.0	0.0	0.0	0.0		
19	0.0	0.0	0.13	0.0	0.0	0.0	0.0	0.0	0.35	0.0	0.0	0.0	0.0		
20	0.0	0.0	0.0	0.0	0.0	0.0	0.93	0.25	0.07	0.0	0.0	0.0	0.01		
21	0.0	0.0	0.07	0.0	0.0	0.0	0.0	0.0	0.25	0.02	0.0	0.0	0.07		
22	0.0	0.12	0.0	0.0	0.0	0.0	0.0	0.0	0.03	4.21	0.40	0.0	0.0		
23	0.0	0.07	0.0	0.02	0.04	0.0	0.0	0.0	0.0	0.04	0.03	0.0	0.0		
24	0.0	0.13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
25	0.0	0.0	0.0	0.01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
26	0.0	0.0	0.0	0.24	0.0	0.0	0.0	0.0	0.0	0.02	0.01	0.0	0.0		
27	0.0	0.16	0.0	0.0	0.14	0.0	0.0	0.02	0.0	0.0	0.0	0.0	0.0		
28	0.0	0.13	0.58	0.0	0.01	0.0	0.29	0.0	0.0	0.0	0.0	0.0	0.0		
29	0.0		0.0	0.79	0.89	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
30	0.0		0.02	0.88	0.01	0.0	0.0	0.05	0.0	0.0	0.0	0.0	0.01		
31	0.0		0.0		0.16			0.0	0.0		0.0		0.0		
TOTAL		0.10	0.61	2.65	2.85	2.49	1.74	1.25	1.12	6.20	2.03	0.82	0.29		
STA AV		1.00	1.29	1.77	2.85	4.16	2.14	1.70	3.19	4.25	1.71	1.78	0.80		

NOTES: For daily air temperatures in the vicinity, see table for Watershed W-700, (69.007) of this publication. STA AV values are a Thiessen weighted average of 66 rain gages on the watershed for record period of Jan. 1964 to Dec. 1970. STA AV based on 7 yr (1964-70) record period.

1970		MEAN DAILY DISCHARGE (cfs)					CHICKASHA, OKLAHOMA			WATERSHED 600 NEAR TABLE			
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
1	105.3	134.7	131.8	156.3	1252.4	1294.3	35.5	4.7	44.7	75.1	37.7	54.0	
2	150.0	128.9	133.3	164.4	558.2	975.2	32.7	1.5	34.1	69.0	40.0	53.1	
3	118.9	127.4	131.8	184.6	846.9	569.3	28.7	1.4	41.5	62.2	41.5	53.1	
4	112.0	124.5	127.4	186.3	595.8	653.2	27.4	1.4	37.7	58.5	41.5	53.1	
5	105.3	123.1	123.1	179.4	375.6	509.5	22.6	1.2	32.0	72.9	41.5	53.1	
6	98.8	121.7	143.5	179.4	277.1	324.4	22.1	1.1	28.7	232.6	40.0	54.9	
7	96.3	121.7	199.7	181.1	238.0	235.2	22.6	0.9	25.6	168.1	40.0	54.9	
8	93.8	123.1	184.6	174.3	215.1	193.3	16.7	0.8	26.2	108.4	42.3	57.6	
9	92.5	121.7	172.7	161.1	195.1	167.7	14.4	0.6	21.5	144.1	41.5	60.3	
10	92.5	121.7	151.6	154.7	182.9	145.3	18.3	0.5	15.8	93.1	40.0	60.3	
11	92.5	121.7	137.7	145.3	167.7	142.3	22.1	0.5	13.0	46.3	40.0	59.4	
12	92.5	121.7	140.7	140.7	154.7	883.5	20.4	0.4	13.0	38.5	40.8	57.6	
13	98.8	121.7	139.2	139.2	143.8	509.0	21.5	0.4	13.0	36.3	47.1	59.4	
14	140.7	121.7	134.7	136.2	133.3	269.0	14.4	0.4	17.7	34.1	59.4	68.0	
15	166.0	121.7	127.4	134.7	855.4	227.6	11.7	0.4	16.3	35.5	59.4	71.0	
16	145.3	121.7	131.8	137.7	411.2	213.2	9.0	0.4	15.8	37.0	53.1	74.1	
17	139.2	123.1	143.8	191.0	247.6	149.4	6.0	0.2	29.4	39.2	51.3	72.0	
18	118.9	121.7	150.0	191.6	190.5	118.9	3.4	0.1	26.2	43.1	51.3	67.0	
19	101.4	121.7	154.7	200.5	197.6	98.8	2.6	14.2	23.8	49.6	49.6	62.2	
20	86.4	124.5	151.6	250.3	181.7	90.5	2.6	81.6	23.2	52.2	48.8	61.3	
21	86.4	126.0	153.1	442.4	127.4	146.6	3.0	75.3	22.1	50.5	48.0	59.4	
22	105.3	124.5	140.7	361.2	116.1	126.8	2.6	27.4	829.1	53.2	47.1	64.1	
23	116.1	126.0	142.3	324.2	113.4	104.1	2.2	121.9	1976.0	86.2	47.1	62.2	
24	171.0	128.9	139.2	324.8	106.6	72.6	1.8	377.6	303.5	51.3	48.8	62.2	
25	177.7	127.4	134.7	242.0	105.3	55.1	1.7	258.9	149.8	47.1	49.6	61.3	
26	176.0	126.0	133.3	207.7	96.3	55.1	1.7	423.1	95.2	45.5	50.5	58.5	
27	153.1	121.7	133.3	207.7	92.5	51.3	1.4	405.7	88.0	43.9	51.3	60.3	
28	145.3	126.0	136.2	188.1	96.3	44.1	1.4	220.3	129.1	39.2	52.2	61.3	
29	143.8		151.6	177.7	2858.0	40.7	1.2	115.7	115.9	38.5	53.1	62.2	
30	142.3		153.1	242.1	2062.7	39.1	18.2	78.1	91.5	37.0	54.0	62.2	
31	139.2		154.7		1010.7		23.1	54.9		37.7		61.3	
MEAN	122.69	124.15	144.63	276.19	458.25	283.50	13.32	73.15	143.31	65.35	46.95	60.69	
INCHES	0.030	0.027	0.035	0.065	0.112	0.067	0.003	0.018	0.034	0.016	0.011	0.015	
STA AV	0.042	0.037	0.047	0.076	0.167	0.103	0.041	0.037	0.077	0.069	0.066	0.042	

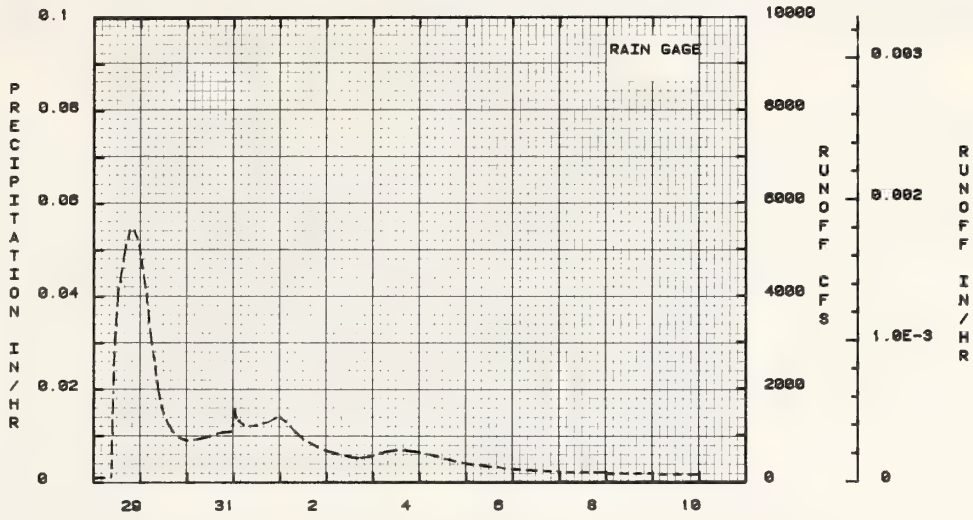
NOTES: To convert mean daily discharge in CFS to IN/DAY, multiply by 0.000007903. To convert discharge in inches to AC-FT, multiply by 250,983. STA AV based on 8 yr (1963-70) record period.

1970		SELECTED RUNOFF EVENT					CHICKASHA, OKLAHOMA			WATERSHED 600 NEAR TABLE			
ANTECEDENT CONDITIONS		Date		Rainfall		Runoff		Date		Rainfall		Runoff	
Mo-Day	(inches)	Mo-Day	(inches)	Mo-Day	(in/hr)	Mo-Day	(inches)	Mo-Day	(in/hr)	Mo-Day	(inches)	Mo-Day	(inches)
EVENT OF MAY 29 - JUNE 10, 1970													
5-29	0.0							5-29	1	93.800	0.0		
									212	94.000	0.0001		
									300	103.200	0.0001		
									530	109.400	0.0002		
									848	110.300	0.0003		
WATERSHED CONDITIONS:													
For area not included above subwatersheds as determined from a 1967 survey; sowed crop - 20%; row crop - 6%; alfalfa - 12%; pasture and range - 52%; and miscellaneous - 10%.													
									900	182.900	0.0003		
									906	314.500	0.0003		
									912	475.000	0.0003		
									918	646.398	0.0003		
									924	910.299	0.0003		
									930	1160.198	0.0003		
									936	1348.398	0.0003		
									942	1556.800	0.0003		
									948	1782.799	0.0004		
									954	1933.798	0.0005		
									1000	1961.398	0.0006		
									1012	2219.799	0.0007		
									1018	2563.498	0.0008		
									1030	2818.898	0.0010		
									1042	3085.799	0.0012		
									1100	3245.198	0.0015		
									1124	3474.600	0.0019		
									1142	3661.999	0.0023		
									1212	3942.500	0.0029		
									1242	4178.586	0.0036		
									1330	4388.785	0.0047		
									1430	4624.484	0.0062		
									1530	4906.086	0.0078		
									1630	5118.883	0.0095		
									1830	5447.086	0.0130		
									2030	5423.184	0.0166		
									2230	5247.086	0.0201		
									2400	4924.785	0.0226		
								5-30	100	4605.883	0.0242		
									230	4196.184	0.0264		

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.0000003293. No precipitation record is shown because most of the watershed lies outside of the area in which precipitation is measured.

1970	SELECTED RUNOFF EVENT					CHICKASHA, OKLAHOMA WATERSHED 600 NEAR TABLE				
ANTECEDENT CONDITIONS			RAINFALL			RUNOFF				
Date Mo-Day	Rainfall (inches)	Runoff (inches)	Date Mo-Day	Time of Day	Intensity (in/hr)	Acc. (inches)	Date Mo-Day	Time of Day	Rate (cfs)	Acc. (inches)
EVENT OF MAY 29 - JUNE 10, 1970 (CONTINUED)										
							5-30	330	3854.198	0.0277
								430	3453.098	0.0289
								500	3261.800	0.0295
								600	2971.198	0.0305
								700	2642.800	0.0314
								800	2315.398	0.0322
								900	2019.898	0.0329
								1000	1802.500	0.0335
								1100	1618.798	0.0341
								1200	1476.500	0.0346
								1400	1266.999	0.0355
								1700	1077.099	0.0367
								2100	935.398	0.0380
								2400	901.799	0.0389
							5-31	600	934.698	0.0407
								1200	1001.500	0.0426
								1800	1076.499	0.0447
								2300	1098.499	0.0465
								2330	1232.299	0.0467
								2400	1501.198	0.0469
							6- 1	30	1568.398	0.0472
								130	1380.599	0.0477
								230	1316.298	0.0481
								500	1238.698	0.0492
								830	1206.198	0.0506
								1200	1227.898	0.0520
								1800	1304.898	0.0545
								2200	1385.698	0.0563
								2400	1375.698	0.0572
							6- 2	300	1303.598	0.0585
								730	1099.898	0.0603
								1200	919.099	0.0618
								1930	746.398	0.0639
								2400	671.698	0.0650
							6- 3	600	597.100	0.0663
								1200	541.100	0.0674
								1600	519.100	0.0681
								1800	524.000	0.0684
								2400	569.000	0.0695
							6- 4	600	649.300	0.0707
								1200	692.300	0.0720
								1800	670.898	0.0733
								2400	631.898	0.0746
							6- 5	600	573.000	0.0758
								1500	475.600	0.0774
								2400	390.000	0.0787
							6- 6	900	335.300	0.0798
								2400	267.698	0.0813
							6- 7	1200	231.800	0.0823
								2400	209.400	0.0832
							6- 8	1200	193.300	0.0840
							6- 9	1200	167.700	0.0854
							6-10	1200	145.300	0.0866

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.000003293. No precipitation record is shown because most of the watershed lies outside of the area in which precipitation is measured.



EVENT OF MAY 29 - JUNE 10, 1970
CHICKASHA, OKLAHOMA WATERSHED 600 NEAR TABLER

CHICKASHA, OKLAHOMA WATERSHED 700 NEAR ALEX

LOCATION: Washita River Watershed above Alex, Okla.; Southwest Central Oklahoma and Texas Panhandle; in Grady, Caddo, Canadian, Kiowa, Washita, Custer, Beckham and Roger Mills Counties, Okla.; and Hemphill, Wheeler, and Gray Counties, Tex.; Washita River, Red River Basin. GAGING STATION--NW1/4 sec. 7, T. 5 N., R. 5 W., lat. 34 deg. 55 min., long. 97 deg. 46 min., 1 mile north of Alex, Okla.; at county road bridge over Washita River at river mile 226.5 approximately 3.8 miles downstream from confluence of Winter Creek.

AREA: 3061120.00 acres 4783.00 sq. miles

MONTHLY PRECIPITATION AND RUNOFF (inches)							CHICKASHA, OKLAHOMA WATERSHED 700 NEAR ALEX								
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual	
1970	P	0.10	0.62	2.55	2.69	2.57	1.85	1.18	1.20	6.73	2.28	0.86	0.31	22.94	
	Q	0.030	0.028	0.037	0.064	0.115	0.069	0.003	0.017	0.048	0.022	0.012	0.016	0.461	
STA AV	P	1.30	1.38	1.76	2.80	4.38	2.07	2.03	2.92	4.20	1.44	1.92	0.83	27.03	
	Q	0.050	0.046	0.054	0.080	0.153	0.151	0.051	0.041	0.092	0.081	0.088	0.052	0.937	
ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS															
		Maximum Discharge		1 Hour		2 Hours		Maximum Volume for Selected Time Interval				2 Days		8 Days	
		Date	Rate	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.
1970		5-29	0.002	5-29	0.002	5-29	0.004	5-29	0.011	5-29	0.021	5-29	0.033	5-29	0.042
MAXIMUMS FOR PERIOD OF RECORD															
		5- 7	0.003	5- 7	0.003	5- 7	0.006	9-20	0.019	9-20	0.035	5- 7	0.064	5- 6	0.114
		1969		1969		1969		1962		1962		1969		1969	1965

NOTES: Watershed conditions: For area not included above subwatersheds as determined from a 1967 survey; sowed crop 11%; row crop - 9%; alfalfa - 7%; pasture and range - 66%; and miscellaneous - 7%. For map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1965, USDA Misc. Pub. 1216, p. 69.7-21. Precipitation records began Oct. 1961; runoff records began Sept. 1961. STA AV (P) values are a Thiessen weighted average of 21 gages for 1963-69 and for 77 gages for 1970 on the reach from Tabler to Alex, Okla., for total period of record (1963-70). For long-time precipitation records, see National Weather Service records at Chickasha, Okla.

1970 DAILY AIR TEMPERATURE (degrees F)													CHICKASHA, OKLAHOMA WATERSHED 700 NEAR ALEX	
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
	max min	max min	max min	max min	max min	max min	max min	max min	max min	max min	max min	max min		
1	39 14	49 38	74 52	88 33	62 43	67 57	98 70	101 72	86 71	78 60	45 33	70 42		
2	37 18	43 20	75 60	63 29	69 41	74 54	100 73	98 74	88 70	87 55	51 31	73 32		
3	40 14	41 16	76 45	67 35	77 41	62 53	106 76	99 75	97 75	77 52	53 30	73 35		
4	40 13	62 39	60 35	62 32	84 50	68 55	93 70	94 73	96 78	82 52	53 35	64 27		
5	37 18	58 31	64 30	65 28	84 53	78 52	89 60	97 78	94 76	78 64	64 29	58 30		
6	29 13	66 32	51 47	81 37	83 56	86 52	93 69	98 75	94 74	82 67	68 39	57 22		
7	31 11	57 41	59 42	80 40	81 57	88 58	107 75	98 74	98 77	84 49	70 34	61 31		
8	20 8	56 30	65 36	89 49	80 69	87 65	97 79	101 76	90 71	49 39	74 46	70 44		
9	31 11	50 26	73 36	73 43	90 65	87 67	90 72	103 80	96 73	60 38	63 44	71 38		
10	41 27	68 24	37 31	79 45	89 66	84 79	101 71	90 74	80 62	65 40	68 29	72 31		
11	39 27	54 30	35 31	80 51	89 68	80 71	102 72	92 67	89 61	68 51	54 34	42 23		
12	33 26	52 18	43 30	73 50	92 70	95 70	85 71	95 64	94 70	61 46	54 27	55 18		
13	40 27	61 32	52 24	67 41	90 67	90 74	90 71	98 63	74 60	72 44	42 38	52 24		
14	38 27	36 26	58 25	64 40	87 58	94 73	95 71	98 69	86 69	59 49	41 29	56 27		
15	58 28	47 26	52 28	78 58	68 52	97 72	96 72	94 72	90 65	56 43	45 24	49 42		
16	48 31	61 18	43 31	66 59	80 47	99 73	93 72	97 71	78 63	56 39	60 27	54 32		
17	46 15	78 36	36 30	69 56	83 53	99 75	97 74	100 72	78 71	53 45	63 32	66 34		
18	17 12	60 31	45 35	83 60	83 56	97 74	99 72	102 80	80 69	56 48	67 30	65 34		
19	22 14	48 21	48 35	70 44	88 53	99 71	101 74	93 70	87 65	67 42	62 38	39 29		
20	26 20	59 19	41 33	75 46	89 62	97 69	84 59	92 73	89 73	71 44	62 28	41 32		
21	26 16	59 32	48 33	79 39	87 62	82 64	76 55	88 72	87 72	75 51	75 41	53 35		
22	34 25	50 42	60 31	81 61	85 62	86 60	83 57	82 72	76 57	80 63	57 28	65 33		
23	57 25	48 45	70 36	67 49	85 62	92 66	88 52	87 65	69 54	68 54	36 20	48 19		
24	59 30	51 43	76 41	69 41	83 64	97 70	91 60	90 59	80 54	74 49	43 17	47 14		
25	67 39	47 27	56 37	74 57	85 61	98 69	94 67	92 60	78 58	78 56	66 36	41 22		
26	66 36	64 25	55 27	81 55	77 65	102 70	94 69	95 61	64 51	81 47	81 40	48 23		
27	69 30	62 30	60 34	89 67	80 63	94 62	96 71	97 64	66 45	53 45	46 31	55 23		
28	70 44	62 51	46 33	88 69	83 62	99 68	90 73	92 64	74 52	62 32	51 36	58 25		
29	44 23		43 34	75 68	86 61	94 74	97 75	90 68	74 58	67 34	74 39	56 24		
30	54 19		47 42	74 48	86 65	94 74	99 77	91 67	79 57	72 42	72 51	54 24		
31	58 25		54 44		80 63		98 78	92 67		59 43		56 29		
AV.	42 22	55 30	55 36	73 48	83 59	89 66	94 70	95 70	84 65	69 48	59 33	57 29		
MEAN	32.3	42.9	45.4	60.4	70.7	77.7	82.0	82.4	74.8	58.3	46.0	43.1		
STA AV	48 25	52 28	60 36	74 50	80 57	88 67	94 71	92 68	83 61	73 49	63 37	52 29		

NOTES: AV and STA AV are rounded to the nearest degree. Mean rounded to the nearest tenth of a degree. STA AV based on records from Sept. 1962 through Dec. 1970. For Chickasha Experiment Station Evaporation Data, see National Weather Service Climatological Data for Oklahoma.

1970	DAILY PRECIPITATION (inches)					CHICKASHA, OKLAHOMA				WATERSHED 700 NEAR ALEX			
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
1	0.0	0.0	0.0	0.16	0.0	0.14	0.0	0.0	0.02	0.01	0.13	0.0	
2	0.0	0.0	0.0	0.0	0.0	0.02	0.0	0.0	0.03	0.0	0.0	0.0	
3	0.0	0.0	0.0	0.0	0.0	0.46	0.0	0.0	0.02	0.0	0.0	0.0	
4	0.0	0.0	0.0	0.26	0.0	0.19	0.0	0.0	0.0	0.0	0.0	0.0	
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.81	0.0	0.0	
6	0.0	0.0	1.02	0.0	0.0	0.0	0.04	0.0	0.0	0.0	0.0	0.0	
7	0.0	0.0	0.13	0.0	0.0	0.0	0.0	0.0	0.10	0.14	0.0	0.0	
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.01	0.51	0.0	0.0	
9	0.0	0.0	0.0	0.01	0.0	0.0	0.10	0.01	0.0	0.0	0.0	0.0	
10	0.0	0.0	0.0	0.0	0.0	0.0	0.01	0.0	0.01	0.0	0.0	0.0	
11	0.0	0.0	0.0	0.0	0.0	0.11	0.14	0.0	0.01	0.0	0.0	0.0	
12	0.0	0.0	0.02	0.0	0.0	0.0	0.38	0.0	0.0	0.0	0.0	0.0	
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.65	0.0	0.73	0.0	
14	0.0	0.0	0.0	0.0	1.14	0.0	0.0	0.0	0.21	0.0	0.0	0.0	
15	0.0	0.0	0.0	0.0	0.11	0.0	0.0	0.0	0.0	0.04	0.0	0.21	
16	0.0	0.0	0.59	0.38	0.0	0.0	0.0	0.0	0.58	0.06	0.0	0.0	
17	0.09	0.0	0.0	0.02	0.0	0.0	0.0	0.0	0.42	0.20	0.0	0.0	
18	0.01	0.0	0.01	0.09	0.0	0.0	0.0	0.41	0.0	0.0	0.0	0.0	
19	0.0	0.0	0.13	0.0	0.0	0.0	0.0	0.41	0.0	0.0	0.0	0.0	
20	0.0	0.0	0.0	0.0	0.0	0.92	0.23	0.06	0.0	0.0	0.0	0.02	
21	0.0	0.0	0.06	0.0	0.0	0.01	0.0	0.24	0.02	0.0	0.0	0.07	
22	0.0	0.12	0.0	0.0	0.0	0.0	0.0	0.03	4.59	0.46	0.0	0.0	
23	0.0	0.07	0.0	0.04	0.03	0.0	0.0	0.0	0.04	0.03	0.0	0.0	
24	0.0	0.14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
25	0.0	0.0	0.0	0.01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
26	0.0	0.0	0.0	0.20	0.0	0.0	0.0	0.0	0.02	0.02	0.0	0.0	
27	0.0	0.15	0.0	0.0	0.14	0.0	0.01	0.0	0.0	0.0	0.0	0.0	
28	0.0	0.14	0.57	0.0	0.01	0.0	0.27	0.0	0.0	0.0	0.0	0.0	
29	0.0	0.0	0.0	0.67	0.83	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
30	0.0	0.0	0.02	0.85	0.01	0.0	0.0	0.04	0.0	0.0	0.0	0.01	
31	0.0	0.0	0.0	0.0	0.30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
TOTAL	0.10	0.62	2.55	2.69	2.57	1.85	1.18	1.20	6.73	2.28	0.86	0.31	
STA AV	1.30	1.38	1.76	2.80	4.38	2.07	2.03	2.92	4.20	1.44	1.52	0.83	

NOTES: STA AV (P) values are a Thiessen weighted average of 21 gages for 1963-69 and for 77 gages for 1970. STA AV based on 8 yr for total period of record (1963-70).

1970	MEAN DAILY DISCHARGE (cfs)					CHICKASHA, OKLAHOMA				WATERSHED 700 NEAR ALEX			
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
1	105.0E	133.0	149.0	164.0	1520.0	1510.0	38.0	12.0	46.0	100.0	44.0	58.0	
2	105.0E	126.0	144.0	172.0	579.0	1100.0	34.0	4.0	34.0	84.0	45.0	57.0	
3	108.0E	123.0	141.0	186.0	852.0	601.0	30.0	2.0	40.0	70.0	48.0	59.0	
4	108.0E	122.0	137.0	194.0	626.0	660.0	29.0	1.9	38.0	63.0	48.0	57.0	
5	108.0E	120.0	132.0	186.0	408.0	536.0	25.0	1.7	34.0	111.0	47.0	57.0	
6	108.0E	122.0	144.0	184.0	315.0	347.0	22.0	1.3	29.0	224.0	48.0	58.0	
7	108.0E	123.0	202.0	192.0	257.0	249.0	22.0	1.0	28.0	220.0	45.0	57.0	
8	104.0E	125.0	190.0	188.0	228.0	203.0	20.0	0.9	27.0	314.0	47.0	61.0	
9	101.0E	125.0	179.0	170.0	205.0	181.0	17.0	0.5	22.0	216.0	46.0	63.0	
10	104.0E	126.0	162.0	164.0	183.0	149.0	18.0	0.2	16.0	162.0	45.0	65.0	
11	108.0E	125.0	151.0	155.0	170.0	147.0	21.0	0.1	14.0	89.0	44.0	63.0	
12	128.0E	126.0	147.0	152.0	159.0	750.0	20.0	0.1	12.0	68.0	45.0	62.0	
13	140.0E	128.0	151.0	146.0	144.0	490.0	22.0	0.0	11.0	61.0	56.0	62.0	
14	155.0E	129.0	146.0	141.0	133.0	257.0	16.0	0.0	16.0	50.0	74.0	71.0	
15	151.0E	130.0	135.0	137.0	808.0	209.0	14.0	0.0	15.0	47.0	71.0	78.0	
16	147.0E	130.0	138.0	137.0	435.0	222.0	10.0	0.0	16.0	45.0	63.0	84.0	
17	140.0E	130.0	155.0	174.0	253.0	156.0	8.4	0.0	31.0	48.0	60.0	79.0	
18	112.0E	129.0	160.0	199.0	199.0	120.0	5.6	0.0	29.0	51.0	59.0	74.0	
19	108.0E	126.0	162.0	228.0	187.0	96.0	6.4	2.0	23.0	55.0	58.0	65.0	
20	109.0E	126.0	160.0	252.0	197.0	88.0	2.9	33.0	22.0	59.0	56.0	64.0	
21	108.0E	126.0	159.0	419.0	140.0	147.0	3.3	125.0	21.0	58.0	55.0	64.0	
22	108.0E	125.0	151.0	365.0	122.0	122.0	3.3	33.0	1310.0	58.0	52.0	74.0	
23	113.0E	132.0	146.0	335.0	115.0	114.0	2.7	46.0	2810.0	140.0	51.0	70.0	
24	167.0E	141.0	143.0	352.0	109.0	79.0	2.4	355.0	478.0	83.0	52.0	68.0	
25	162.0E	141.0	141.0	274.0	111.0	58.0	2.0	254.0	264.0	70.0	53.0	68.0	
26	162.0E	141.0	141.0	228.0	103.0	56.0	2.0	382.0	175.0	64.0	54.0	65.0	
27	147.0E	137.0	133.0	218.0	96.0	54.0	1.9	421.0	147.0	57.0	55.0	65.0	
28	141.0E	144.0	144.0	207.0	100.0	48.0	1.9	246.0	172.0	50.0	55.0	66.0	
29	141.0E	140.0	160.0	192.0	2380.0	42.0	2.2	127.0	160.0	47.0	55.0	67.0	
30	138.0E	140.0	160.0	2090.0	2630.0	40.0	4.9	82.0	126.0	44.0	57.0	68.0	
31	137.0E	140.0	160.0	1060.0	1060.0	24.0	58.0	58.0	44.0	44.0	57.0	67.0	
MEAN	125.19	128.96	152.35	273.37	478.19	294.37	13.93	70.64	205.53	92.00	52.53	65.68	
INCHES	0.030	0.028	0.037	0.064	0.115	0.069	0.003	0.017	0.048	0.022	0.012	0.016	
STA AV	0.050	0.046	0.054	0.080	0.153	0.151	0.051	0.041	0.092	0.081	0.088	0.052	

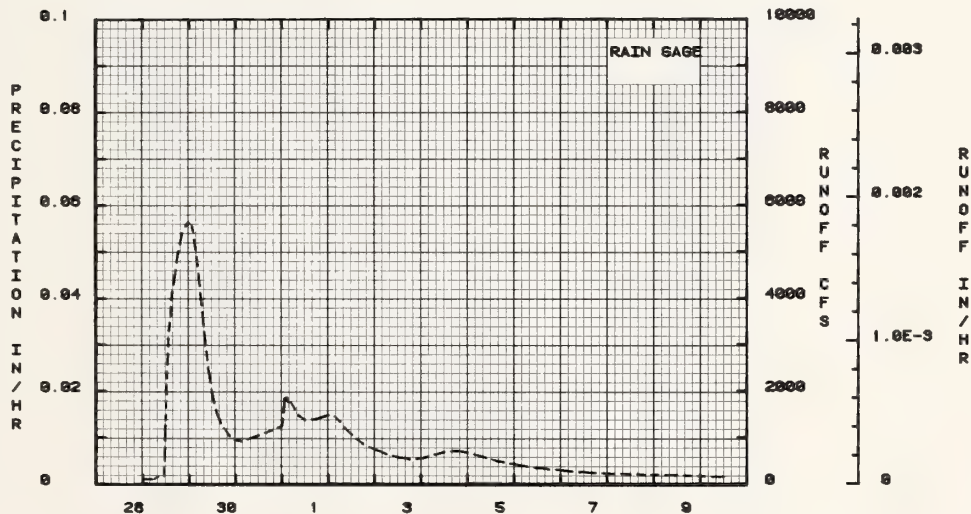
NOTES: To convert mean daily discharge in CFS to IN/DAY, multiply by 0.000007776. To convert discharge in inches to AC-FT, multiply by 255,093. STA AV based on 10 yr (1961-70) record period.

1970 SELECTED RUNOFF EVENT			CHICKASHA, OKLAHOMA			WATERSHED 700 NEAR ALEX		
ANTECEDENT CONDITIONS			RAINFALL			RUNOFF		
Date Mo-Day	Rainfall (inches)	Runoff (inches)	Date Mo-Day	Time of Day	Intensity (in/hr)	Acc. (inches)	Date Mo-Day	Time of Day
								Rate (cfs)
								Acc. (inches)
EVENT OF MAY 28 - JUNE 10, 1970								
5-28		0.0					5-28	2400
							5-29	430
								600
								800
								1100
								1112
								1124
								1130
								1136
								1142
								1148
								1200
								1212
								1218
								1230
								1242
								1300
								1318
								1336
								1400
								1430
								1500
								1600
								1700
								1830
								2030
								2300
								2400
			5-30				136	
							300	
							430	
							530	
							630	
							730	
							800	
							830	
							900	
							930	
							1000	
							1100	
							1200	
							1300	
							1430	
							1630	
							1800	
							2100	
							2400	
			5-31				300	
							600	
							1200	
							2400	
			6- 1				100	
							130	
							230	
							330	
							500	
							900	
							1200	
							1800	
							2400	
			6- 2				330	
							600	
							1200	
							1800	
							2400	
			6- 3				600	
							1200	
							1800	
							2400	
			6- 4				1200	
							1800	
							2400	
			6- 5				600	
							1500	
							2400	

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.0000003240. No precipitation record is shown because most of the watershed lies outside of the area in which precipitation is measured.

1970	SELECTED RUNOFF EVENT			CHICKASHA, OKLAHOMA			WATERSHED 700 NEAR ALEX			
ANTECEDENT CONDITIONS			RAINFALL			RUNOFF				
Date Mo-Day	Rainfall (inches)	Runoff (inches)	Date Mo-Day	Time of Day	Intensity (in/hr)	Acc. (inches)	Date Mo-Day	Time of Day	Rate (cfs)	Acc. (inches)
EVENT OF MAY 28 - JUNE 10, 1970 (CONTINUED)										
							6- 6	636	368.500	0.0823
								1130	346.000	0.0829
								1800	316.898	0.0836
								2400	293.600	0.0842
							6- 7	600	264.800	0.0847
								1200	247.900	0.0852
								1800	227.500	0.0857
								2400	216.000	0.0861
							6- 8	1200	202.700	0.0869
							6- 9	1200	180.900	0.0884
							6-10	1200	148.900	0.0897

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.0000003240. No precipitation record is shown because most of the watershed lies outside of the area in which precipitation is measured.



EVENT OF MAY 28 - JUNE 10, 1970
CHICKASHA, OKLAHOMA WATERSHED 700 NEAR ALEX

CHICKASHA, OKLAHOMA WATERSHED 611 NEAR ALEX

LOCATION: Big Dry Creek Watershed above State Road 19 bridge in Grady County, Okla.; tributary to Washita River; Red River Basin.

AREA: 4845.00 acres 7.57 sq. miles

MONTHLY PRECIPITATION AND RUNOFF (inches)														CHICKASHA, OKLAHOMA WATERSHED 611 NEAR ALEX															
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual															
1970	P	0.08	0.62	2.27	1.63	3.65	1.92	0.71	1.24	9.59	2.34	1.09	0.34	25.48															
	Q	0.048	0.060	0.067	0.054	0.030	0.216	0.007	0.0	1.114	0.150	0.036	0.046	1.828															
STA AV	P	1.05	1.22	1.70	2.47	3.84	2.63	1.87	2.46	4.44	1.67	2.08	0.92	26.34															
	Q	0.075	0.088	0.101	0.148	0.279	0.204	0.067	0.028	0.255	0.056	0.081	0.061	1.443															
ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																													
		Maximum Discharge		1 Hour		2 Hours		Maximum Volume for Selected Time Interval																					
		Date	Rate	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.										
1970		9-22	0.145	9-22	0.128	9-22	0.212	9-22	0.375	9-22	0.563	9-22	0.668	9-22	0.740	9-22	1.024												
MAXIMUMS FOR PERIOD OF RECORD																													
		5- 9	0.501	5- 9	0.423	5- 9	0.557	5- 9	0.649	5- 9	0.667	5- 9	0.880	5- 9	0.988	5- 6	1.154												
		1964		1964		1964		1964		1964		1964		1964		1964													

NOTES: Watershed conditions: From a 1967 survey; sowed crop - 3%; row crop - 5%; alfalfa - 2%; pasture and range - 90%. For maps of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1962, pp. 69.8-5 (Topography), 69.7-9 (Geologic) and 1965, p. 69.7-21 (Composite). Precipitation data obtained from Thiessen weighted average of 7 gages. Precipitation records began Oct. 1961; runoff records began Dec. 1961. For long-time precipitation records, see National Weather Service records at Chickasha, Okla.

1970 DAILY PRECIPITATION (inches)													CHICKASHA, OKLAHOMA WATERSHED 611 NEAR ALEX												
	Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec												
1	0.0	0.0	0.0	0.16	0.0	0.0	0.16	0.0	0.0	0.0	0.0	0.14	0.0												
2	0.0	0.0	0.0	0.02	0.0	0.0	0.01	0.0	0.0	0.02	0.0	0.0	0.0												
3	0.0	0.0	0.0	0.0	0.0	0.0	0.57	0.0	0.0	0.0	0.0	0.0	0.0												
4	0.0	0.0	0.0	0.0	0.35	0.0	0.22	0.0	0.0	0.0	0.0	0.0	0.0												
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.07	0.0	0.0												
6	0.0	0.0	0.73	0.0	0.0	0.0	0.0	0.01	0.0	0.0	0.0	0.0	0.0												
7	0.0	0.0	0.08	0.0	0.0	0.0	0.0	0.0	0.0	0.08	0.09	0.0	0.0												
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.31	0.0	0.0												
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.12	0.0	0.0	0.0	0.0	0.0												
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.01	0.0	0.0	0.0												
11	0.0	0.0	0.0	0.0	0.0	0.0	0.28	0.13	0.0	0.02	0.0	0.0	0.0												
12	0.0	0.0	0.02	0.0	0.0	0.0	0.0	0.18	0.0	0.0	0.0	0.0	0.0												
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.64	0.0	0.95	0.0												
14	0.0	0.0	0.0	0.0	0.0	0.67	0.0	0.0	0.0	0.72	0.0	0.0	0.0												
15	0.0	0.0	0.0	0.0	0.0	0.11	0.0	0.0	0.0	0.0	0.05	0.0	0.24												
16	0.0	0.0	0.77	0.28	0.0	0.0	0.0	0.0	0.0	1.54	0.05	0.0	0.0												
17	0.08	0.0	0.0	0.03	0.0	0.0	0.0	0.0	0.0	1.12	0.25	0.0	0.0												
18	0.0	0.0	0.0	0.13	0.0	0.0	0.0	0.0	0.31	0.0	0.0	0.0	0.0												
19	0.0	0.0	0.15	0.0	0.0	0.0	0.0	0.0	0.42	0.0	0.0	0.0	0.0												
20	0.0	0.0	0.0	0.0	0.0	0.0	0.66	0.14	0.0	0.0	0.0	0.0	0.03												
21	0.0	0.0	0.03	0.0	0.0	0.0	0.02	0.0	0.51	0.0	0.0	0.0	0.07												
22	0.0	0.04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.38	0.49	0.0	0.0												
23	0.0	0.06	0.0	0.02	0.02	0.02	0.0	0.0	0.0	0.06	0.01	0.0	0.0												
24	0.0	0.17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0												
25	0.0	0.01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0												
26	0.0	0.0	0.0	0.06	0.0	0.0	0.0	0.0	0.0	0.0	0.02	0.0	0.0												
27	0.0	0.16	0.0	0.0	0.0	0.05	0.0	0.0	0.0	0.0	0.0	0.0	0.0												
28	0.0	0.18	0.47	0.0	0.0	0.0	0.0	0.13	0.0	0.0	0.0	0.0	0.0												
29	0.0	0.0	0.0	0.16	0.25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0												
30	0.0	0.0	0.0	0.44	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0												
31	0.0	0.0	0.0	2.55	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0												
TOTAL		0.08	0.62	2.27	1.63	3.65	1.92	0.71	1.24	9.59	2.34	1.09	0.34												
STA AV		1.05	1.22	1.70	2.47	3.84	2.63	1.87	2.46	4.44	1.67	2.08	0.92												

NOTES: For daily air temperatures in the vicinity, see table for Watershed W-700, (69.007) of this publication. Daily precipitation values Thiessen weighted average of 7 rain gages on the watershed. STA AV based on 10 yr (1961-70) record period.

1970 MEAN DAILY DISCHARGE (cfs) CHICKASAW, OKLAHOMA WATERSHED 611 NEAR ALEX												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.30	0.80	0.40	0.50	0.30	33.97	0.10	0.0	0.0	3.00	0.30	0.30
2	0.30	0.70	0.40	0.40	0.30	1.90	0.10	0.0	0.0	2.10	0.30	0.30
3	0.30	0.50	0.40	0.40	0.30	1.20	0.10	0.0	0.0	1.80	0.30	0.30
4	0.30	0.60	0.40	0.40	0.30	1.20	0.10	0.0	0.0	1.60	0.30	0.30
5	0.30	0.50	0.40	0.50	0.20	0.80	0.10	0.0	0.0	4.19	0.20	0.30
6	0.30	0.50	0.60	0.40	0.20	0.60	0.10	0.0	0.0	1.60	0.30	0.30
7	0.30	0.50	0.50	0.40	0.20	0.50	0.10	0.0	0.0	1.20	0.30	0.30
8	0.30	0.50	0.50	0.40	0.30	0.30	0.10	0.0	0.0	1.40	0.20	0.30
9	0.30	0.40	0.40	0.40	0.30	0.20	0.10	0.0	0.0	1.00	0.20	0.30
10	0.30	0.40	0.40	0.40	0.30	0.20	0.10	0.0	0.0	0.90	0.20	0.30
11	0.40	0.40	0.40	0.40	0.20	0.20	0.10	0.0	0.0	0.80	0.20	0.30
12	0.30	0.40	0.40	0.40	0.20	0.30	0.10	0.0	0.0	0.80	0.20	0.30
13	0.30	0.40	0.40	0.30	0.10	0.20	0.10	0.0	0.0	0.80	0.40	0.30
14	0.30	0.40	0.40	0.30	0.31	0.20	0.0 T	0.0	1.32	0.70	0.40	0.30
15	0.40	0.40	0.40	0.30	0.38	0.10	0.0	0.0	0.10	0.60	0.20	0.30
16	0.40	0.40	0.50	0.40	0.20	0.10	0.0	0.0	10.06	0.60	0.20	0.30
17	0.30	0.40	0.60	0.40	0.20	0.10	0.0	0.0	3.73	0.70	0.30	0.30
18	0.30	0.40	0.50	0.40	0.10	0.10	0.0	0.0	0.23	0.60	0.20	0.30
19	0.30	0.30	0.50	0.40	0.10	0.10	0.0	0.0	0.10	0.60	0.20	0.30
20	0.30	0.30	0.50	0.30	0.10	0.47	0.0	0.0	0.0 T	0.50	0.20	0.30
21	0.30	0.30	0.50	0.30	0.10	0.31	0.0	0.0	0.0	0.50	0.20	0.30
22	0.30	0.30	0.40	0.30	0.10	0.10	0.10	0.0	105.45	0.50	0.20	0.30
23	0.30	0.40	0.40	0.30	0.10	0.10	0.0 T	0.0	38.05	0.92	0.20	0.30
24	0.40	0.40	0.40	0.30	0.10	0.10	0.0	0.0	14.20	0.50	0.20	0.30
25	0.40	0.40	0.40	0.30	0.10	0.10	0.0	0.0	12.80	0.60	0.20	0.30
26	0.30	0.40	0.30	0.30	0.10	0.10	0.0	0.0	11.70	0.50	0.30	0.30
27	0.30	0.40	0.60	0.30	0.10	0.10	0.0	0.0	10.10	0.30	0.20	0.30
28	0.30	0.50	0.50	0.30	0.10	0.10	0.0	0.0	8.10	0.30	0.20	0.30
29	0.30		0.50	0.30	0.20	0.10	0.0	0.0	6.40	0.30	0.30	0.30
30	0.30		0.40	0.50	0.10	0.10	0.0	0.0	4.50	0.30	0.30	0.30
31	0.30		0.40		0.42		0.0	0.0		0.30		0.30
MEAN	0.3161	0.4393	0.4387	0.3667	0.1971	1.4649	0.0452	0.0	7.5608	0.9843	0.2467	0.3000
INCHES	0.048	0.060	0.067	0.054	0.030	0.216	0.007	0.0	1.114	0.150	0.036	0.046
STA AV	0.075	0.088	0.101	0.148	0.279	0.204	0.067	0.028	0.255	0.056	0.081	0.061

NOTES: To convert runoff in CPS to IN/DAY, multiply by 0.004913. STA AV based on 10 yr (1961-1970) record period.

CHICKASHA, OKLAHOMA WATERSHED 612 NEAR ALEX

LOCATION: Little Dry Creek Watershed above State Road 19 bridge in Grady County, Okla.; tributary to Big Dry Creek, Washita River; Red River Basin. GAGING STATION--NW1/4 sec. 33, T. 6 N., R. 6 W., lat. 35 deg. 57 min., long. 97 deg. 51 min., 5 miles Northwest of Alex, Okla.; on state road 19 bridge over little Dry Creek.

AREA: 563.00 acres

MONTHLY PRECIPITATION AND RUNOFF (inches)														CHICKASHA, OKLAHOMA WATERSHED 612 NEAR ALEX															
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual															
1970	P	0.09	0.56	2.14	1.63	3.74	2.62	0.84	0.98	9.06	2.56	1.12	0.34	25.68															
	Q	0.008	0.0	0.0	0.001	0.069	0.136	0.0	0.0	0.643	0.038	0.007	0.0	0.903															
STA AV	P	1.03	1.18	1.64	2.75	3.72	2.69	2.08	2.44	4.46	1.66	2.00	0.89	26.56															
	Q	0.097	0.067	0.068	0.181	0.129	0.220	0.091	0.009	0.195	0.022	0.030	0.112	1.220															
ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																													
		Maximum Discharge		1 Hour		2 Hours		Maximum Volume for Selected Time Interval		6 Hours		12 Hours		1 Day		2 Days		8 Days											
		Date	Rate	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.										
1970		9-22	0.405	9-22	0.239	9-22	0.266	9-22	0.444	9-22	0.593	9-22	0.609	9-21	0.609	9-15	0.626												
MAXIMUMS FOR PERIOD OF RECORD																													
		7-1	0.493	6-23	0.345	6-23	0.549	6-23	0.733	6-23	0.756	6-23	0.756	6-23	0.756	6-23	0.785												
		1968		1963		1963		1963		1963		1963		1963		1963													

NOTES: Watershed conditions: From a 1967 survey; alfalfa - 17%; and pasture and range 83%. For map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1962, USDA Misc. Pub. 1070, p. 69.8-5 (Topography) and p. 69.7-9 (Geologic); 1965, USDA Misc. Pub. 1216, p. 69.7-21 (Composite). Precipitation data obtained from a Thiessen weighted average of 2 gages on the watershed. Precipitation records began Oct. 1961; runoff records began Nov. 1961. For long-time precipitation records, see National Weather Service records at Chickasha, Okla.

1970 DAILY PRECIPITATION (inches)													CHICKASHA, OKLAHOMA WATERSHED 612 NEAR ALEX												
	Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec												
1	0.0	0.0	0.0	0.0	0.19	0.0	0.42	0.0	0.0	0.0	0.0	0.14	0.0												
2	0.0	0.0	0.0	0.03	0.0	0.0	0.03	0.0	0.0	0.06	0.0	0.0	0.0												
3	0.0	0.0	0.0	0.0	0.0	0.0	0.46	0.0	0.0	0.0	0.0	0.0	0.0												
4	0.0	0.0	0.0	0.0	0.30	0.0	0.25	0.0	0.0	0.0	0.0	0.0	0.0												
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.05	0.0	0.0												
6	0.0	0.0	0.0	0.77	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0												
7	0.0	0.0	0.0	0.08	0.0	0.0	0.0	0.0	0.0	0.06	0.10	0.0	0.0												
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.34	0.0	0.0												
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.06	0.01	0.0	0.0	0.0	0.0												
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0												
11	0.0	0.0	0.0	0.0	0.0	0.0	0.18	0.10	0.0	0.01	0.0	0.0	0.0												
12	0.0	0.0	0.0	0.02	0.0	0.0	0.0	0.48	0.0	0.0	0.0	0.0	0.0												
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.60	0.0	0.98	0.0												
14	0.0	0.0	0.0	0.0	0.0	0.86	0.0	0.0	0.0	0.82	0.0	0.0	0.0												
15	0.0	0.0	0.0	0.0	0.0	0.10	0.0	0.0	0.0	0.0	0.02	0.0	0.0												
16	0.0	0.0	0.0	0.62	0.32	0.0	0.0	0.0	0.0	0.91	0.07	0.0	0.0												
17	0.07	0.0	0.0	0.0	0.02	0.0	0.0	0.0	0.0	1.13	0.22	0.0	0.0												
18	0.02	0.0	0.0	0.01	0.11	0.0	0.0	0.0	0.37	0.0	0.0	0.0	0.0												
19	0.0	0.0	0.0	0.15	0.0	0.0	0.0	0.0	0.44	0.0	0.0	0.0	0.0												
20	0.0	0.0	0.0	0.0	0.0	0.0	1.28	0.15	0.0	0.0	0.0	0.0	0.0												
21	0.0	0.0	0.0	0.05	0.0	0.0	0.0	0.0	0.14	0.0	0.0	0.0	0.08												
22	0.0	0.05	0.0	0.0	0.0	0.0	0.0	0.0	0.02	5.41	0.70	0.0	0.0												
23	0.0	0.05	0.0	0.0	0.0	0.01	0.0	0.0	0.0	0.05	0.0	0.0	0.0												
24	0.0	0.17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0												
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0												
26	0.0	0.0	0.0	0.0	0.06	0.0	0.0	0.0	0.0	0.01	0.06	0.0	0.0												
27	0.0	0.13	0.0	0.0	0.0	0.30	0.0	0.0	0.0	0.0	0.0	0.0	0.0												
28	0.0	0.16	0.0	0.41	0.0	0.0	0.0	0.05	0.0	0.0	0.0	0.0	0.0												
29	0.0	0.0	0.0	0.15	0.45	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0												
30	0.0	0.0	0.0	0.48	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.01												
31	0.0	0.0	0.0	0.0	2.02	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0												
TOTAL		0.09	0.56	2.14	1.63	3.74	2.62	0.84	0.98	9.06	2.56	1.12	0.34												
STA AV		1.03	1.18	1.64	2.75	3.72	2.69	2.08	2.44	4.46	1.66	2.00	0.89												

NOTES: For daily air temperatures in the vicinity, see table for Watershed W-700, (69.007) of this publication. Precipitation values are a Thiessen weighted average of 2 rain gages on the watershed. STA AV based on 10 yr (1961-70) record period.

1970 MEAN DAILY DISCHARGE (cfs) CHICKASHA, OKLAHOMA WATERSHED 612 NEAR ALEX												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.0	0.0	0.0	0.0	0.0	2.734	0.0	0.0	0.0	0.0	0.0	0.0
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.485	0.0	0.0
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.090	0.0	0.0
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10	0.100	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11	0.100	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	0.0 T	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.177	0.0
14	0.0	0.0	0.0	0.0	0.007	0.0	0.0	0.0	0.401	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.223	0.0	0.0	0.0
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.170	0.0	0.0	0.0
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.0	0.0	0.0	0.431	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	0.060	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.016	0.0	0.0	0.0	0.0	13.837	0.325	0.0	0.0
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.569	0.003	0.0	0.0
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	0.0	0.0	0.0	0.0	1.632	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MEAN	0.0065	0.0	0.0	0.0005	0.0529	0.1075	0.0	0.0	0.5067	0.0291	0.0059	0.0
INCHES	0.008	0.0	0.0	0.001	0.069	0.136	0.0	0.0	0.643	0.038	0.007	0.0
STA AV	0.097	0.067	0.068	0.181	0.129	0.220	0.091	0.009	0.195	0.022	0.030	0.112

NOTES: To convert mean daily discharge in CFS to IN/DAY, multiply by 0.04228. To convert discharge in inches to AC-FT, multiply by 46.92. STA AV based on 10 yr (1961-70) record period.

1970 SELECTED RUNOFF EVENT CHICKASHA, OKLAHOMA WATERSHED 612 NEAR ALEX											
ANTECEDENT CONDITIONS			RAINFALL				RUNOFF				
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.	
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)	
EVENT OF SEPTEMBER 22, 1970											
RG 000172			RG 000172								
9-22	0.0	0.0	9-22	340	0.0	0.0	9-22	1236	0.0	0.0	
				358	0.7333	0.22		1242	3.400	0.0003	
				521	0.0217	0.25		1248	9.500	0.0014	
				537	0.3000	0.33		1254	36.400	0.0055	
				800	0.0168	0.37		1300	110.900	0.0187	
WATERSHED CONDITIONS:				845	0.2000	0.52		1306	173.100	0.0431	
From a 1967 survey; alfalfa				900	2.6800	1.19		1312	229.900	0.0791	
- 17%; and pasture and range				910	2.8200	1.66		1318	225.000	0.1182	
- 83%.				925	2.5600	2.30		1330	150.400	0.1854	
				952	0.0667	2.33		1342	77.600	0.2254	
				1015	0.2348	2.42		1354	32.200	0.2447	
				1053	0.0474	2.45		1406	12.300	0.2525	
				1106	2.6308	3.02		1430	5.300	0.2587	
				1140	0.3176	3.20		1436	4.500	0.2595	
				1237	0.0211	3.22		1442	7.300	0.2606	
				1242	1.2000	3.32		1448	29.800	0.2638	
				1314	0.0375	3.34		1454	50.300	0.2710	
				1329	1.0400	3.60		1500	75.100	0.2822	
				1353	0.2250	3.69		1506	80.200	0.2956	
				1403	1.4400	3.93		1512	80.200	0.3099	
				1617	0.1478	4.26		1524	59.700	0.3384	
				1747	0.2600	4.65		1542	22.800	0.3563	
				1831	0.5182	5.03		1600	10.090	0.3650	
				1915	0.4909	5.39		1630	4.700	0.3715	
				2019	0.1687	5.57		1700	2.800	0.3748	
								1712	5.100	0.3762	
								1718	7.600	0.3773	
								1724	8.390	0.3787	
								1730	8.900	0.3802	
								1742	13.400	0.3841	
								1800	38.200	0.3978	
								1812	48.100	0.4129	
								1824	37.300	0.4279	
								1842	18.100	0.4426	
								1900	10.400	0.4502	

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.001762.

CHICKASHA, OKLAHOMA WATERSHED 111 NEAR ANADARKO

LOCATION: Tonkawa Creek Watershed above County road South of Anadarko in Caddo County, Okla.; tributary to Washita River; Red River Basin. GAGING STATION--NW1/4 sec. 34, T. 7 N., R. 10 W., lat. 35 deg. 03 min., long. 98 deg. 15 min., 2 miles South of Anadarko, Okla., on upstream side of section line road bridge.

AREA: 16634.00 acres 26.00 sq. miles

MONTHLY PRECIPITATION AND RUNOFF (inches)														CHICKASHA, OKLAHOMA WATERSHED 111 NEAR ANADARKO											
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual											
1970	P	0.07	0.35	3.19	2.47	1.80	2.89	1.36	1.52	5.14	1.24	0.51	0.21	20.75											
	Q	0.047	0.045	0.074	0.068	0.039	0.029	0.000	0.0	0.013	0.0	0.004	0.006	0.327											
STA AV	P	0.62	1.02	1.47	2.69	3.64	2.98	1.83	2.44	3.99	1.56	1.94	0.75	24.93											
	Q	0.080	0.085	0.099	0.150	0.175	0.068	0.036	0.016	0.051	0.029	0.068	0.062	0.920											
ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																									
		Maximum Discharge Date	Rate	1 Hour Date	Vol.	2 Hours Date	Vol.	Maximum Volume for Selected Time Interval 6 Hours Date	Vol.	12 Hours Date	Vol.	1 Day Date	Vol.	2 Days Date	Vol.	8 Days Date	Vol.								
1970		6-11	0.006	6-11	0.005	6-11	0.007	6-11	0.011	6-11	0.012	6-11	0.013	6-11	0.014	3-28	0.024								
MAXIMUMS FOR PERIOD OF RECORD																									
		5-10 1964	0.046	5-10 1964	0.044	5-10 1964	0.080	5-10 1964	0.135	5-10 1964	0.149	5-9 1964	0.234	5-9 1964	0.295	5-9 1964	0.320								

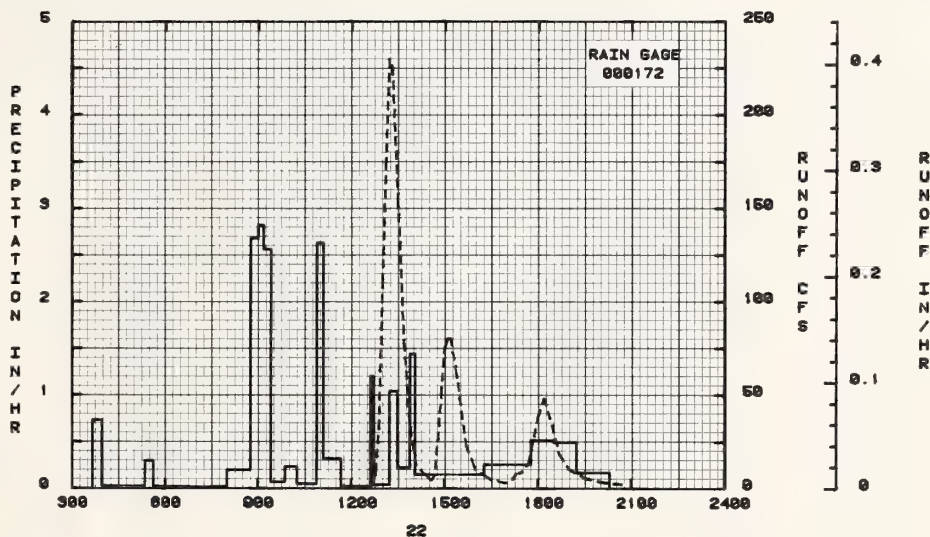
NOTES: Watershed conditions: From a 1967 survey; sowed crop - 14%; row crop - 4%; alfalfa - 2%; pasture and range - 72%; and miscellaneous - 8%. For maps of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1965, USDA Misc. Pub. 1216, p. 69.7-21 and 1962, USDA Misc. Pub. 1070, p. 69.7-9 (Geologic) and p. 69.10-4 (Topography). Precipitation data obtained from a Thiessen weighted average of 6 gages on the watershed. Precipitation records began Oct. 1961; runoff records began June 1962. For long-time precipitation records, see National Weather Service records at Chickasha, Okla.

1970 DAILY PRECIPITATION (inches)														CHICKASHA, OKLAHOMA WATERSHED 111 NEAR ANADARKO											
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec													
1	0.0	0.0	0.0	0.0	0.37	0.0	0.05	0.0	0.0	0.0	0.03	0.10	0.0												
2	0.0	0.0	0.0	0.0	0.0	0.0	0.02	0.0	0.0	0.07	0.0	0.0	0.0												
3	0.0	0.0	0.0	0.0	0.0	0.0	0.26	0.0	0.0	0.0	0.0	0.0	0.0												
4	0.0	0.0	0.0	0.0	0.19	0.0	0.22	0.0	0.0	0.0	0.0	0.0	0.0												
5	0.0	0.0	0.27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.47	0.0	0.0												
6	0.0	0.0	1.33	0.0	0.0	0.0	0.05	0.0	0.0	0.0	0.0	0.0	0.0												
7	0.0	0.0	0.03	0.0	0.0	0.0	0.0	0.0	0.19	0.0	0.0	0.0	0.0												
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.68	0.36	0.0	0.0	0.0												
9	0.0	0.0	0.0	0.0	0.0	0.0	0.07	0.0	0.0	0.0	0.0	0.0	0.0												
10	0.0	0.0	0.0	0.0	0.0	0.0	0.01	0.0	0.01	0.0	0.0	0.0	0.0												
11	0.0	0.0	0.0	0.0	0.0	1.08	0.61	0.0	0.0	0.0	0.0	0.0	0.0												
12	0.0	0.0	0.02	0.0	0.0	0.0	0.06	0.0	0.0	0.0	0.0	0.0	0.0												
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.90	0.0	0.41	0.0	0.0												
14	0.0	0.0	0.0	0.0	1.35	0.0	0.0	0.0	0.05	0.0	0.0	0.0	0.0												
15	0.0	0.0	0.0	0.0	0.04	0.0	0.0	0.0	0.0	0.02	0.0	0.16													
16	0.0	0.0	0.48	0.51	0.0	0.0	0.0	0.0	0.35	0.12	0.0	0.0	0.0												
17	0.07	0.0	0.01	0.03	0.0	0.0	0.0	0.0	0.02	0.24	0.0	0.0	0.0												
18	0.0	0.0	0.02	0.01	0.0	0.0	0.0	0.04	0.0	0.0	0.0	0.0	0.0												
19	0.0	0.0	0.19	0.0	0.0	0.0	0.0	0.04	0.0	0.0	0.0	0.0	0.0												
20	0.0	0.0	0.0	0.0	0.0	1.26	0.23	0.64	0.0	0.0	0.0	0.03													
21	0.0	0.0	0.07	0.0	0.0	0.0	0.0	0.32	0.0	0.0	0.0	0.02													
22	0.0	0.18	0.0	0.0	0.0	0.0	0.0	0.23	2.78	0.0	0.0	0.0	0.0												
23	0.0	0.0	0.0	0.0	0.03	0.0	0.0	0.0	0.01	0.0	0.0	0.0	0.0												
24	0.0	0.05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0												
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.04	0.0	0.0	0.0	0.0												
26	0.0	0.0	0.0	0.14	0.0	0.0	0.0	0.0	0.04	0.0	0.0	0.0	0.0												
27	0.0	0.07	0.0	0.0	0.05	0.0	0.04	0.0	0.0	0.0	0.0	0.0	0.0												
28	0.0	0.05	0.66	0.0	0.03	0.0	0.29	0.0	0.0	0.0	0.0	0.0	0.0												
29	0.0		0.0	0.45	0.30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0												
30	0.0		0.05	0.77	0.0	0.0	0.0	0.25	0.0	0.0	0.0	0.0	0.0												
31	0.0		0.06		0.0		0.0	0.0		0.0		0.0	0.0												
TOTAL	0.07	0.35	3.19	2.47	1.80	2.89	1.36	1.52	5.14	1.24	0.51	0.21													
STA AV	0.62	1.02	1.47	2.69	3.64	2.98	1.83	2.44	3.99	1.56	1.94	0.75													

NOTES: For daily air temperatures in the vicinity, see table for Watershed W-700, (69.007) of this publication. Precipitation values are a Thiessen weighted average of 6 rain gages on the watershed. STA AV based on 10 yr (1961-70) record period.

1970 SELECTED RUNOFF EVENT			CHICKASHA, OKLAHOMA			WATERSHED 612 NEAR ALEX		
ANTECEDENT CONDITIONS			RAINFALL			RUNOFF		
Date Mo-Day	Rainfall (inches)	Runoff (inches)	Date Mo-Day	Time of Day	Intensity (in/hr)	Acc. (inches)	Date Mo-Day	Time of Day
								Rate (cfs)
								Acc. (inches)
EVENT OF SEPTEMBER 22, 1970 (CONTINUED)								
				9-22	1930	5.500	0.4572	
					2000	3.400	0.4611	
					2030	2.300	0.4636	
					2042	2.100	0.4644	

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.001762.



EVENT OF SEPTEMBER 22, 1970
CHICKASHA, OKLAHOMA WATERSHED 612 NEAR ALEX

1970 MEAN DAILY DISCHARGE (cfs) CHICKASHA, OKLAHOMA WATERSHED 111 NEAR ANADARKO												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	1.000	1.000	1.300	2.600	1.600	0.400	0.0	0.0	0.0	0.0	0.0	0.100
2	1.000	1.100	1.200	2.000	1.300	0.500	0.0	0.0	0.0	0.0	0.0	0.100
3	1.000	0.800	1.200	2.500	1.300	0.600	0.0	0.0	0.0	0.0	0.0	0.100
4	1.100	0.900	1.200	2.000	1.400	0.800	0.0	0.0	0.0	0.0	0.0	0.100
5	1.100	1.100	1.200	2.000	1.200	1.000	0.0	0.0	0.0	0.0	0.0	0.100
6	0.800	1.000	3.793	1.800	1.100	0.500	0.0	0.0	0.0	0.0	0.100	0.100
7	0.700	1.000	2.600	1.500	1.100	0.300	0.0	0.0	0.0	0.0	0.100	0.100
8	0.800	1.000	2.000	1.400	0.900	0.200	0.0	0.0	0.0	0.0	0.100	0.100
9	0.700	1.100	1.600	1.400	0.800	0.100	0.0	0.0	0.0	0.0	0.100	0.100
10	1.100	1.200	1.500	1.400	0.700	0.100	0.0	0.0	0.0	0.0	0.100	0.100
11	1.500	1.200	1.400	1.300	0.700	8.696	0.0	0.0	0.0	0.0	0.100	0.100
12	1.100	1.200	1.400	1.200	0.600	1.162	0.077	0.0	0.0	0.0	0.100	0.100
13	1.100	1.200	1.400	1.100	0.500	0.400	0.0	0.0	0.0	0.0	0.100	0.100
14	1.200	1.200	1.300	1.100	0.500	0.200	0.0	0.0	0.0	0.0	0.100	0.100
15	1.200	1.200	1.200	1.200	2.847	0.100	0.0	0.0	0.0	0.0	0.100	0.200
16	1.200	1.100	1.700	1.400	0.800	0.100	0.0	0.0	0.0	0.0	0.100	0.200
17	1.200	1.200	2.100	2.100	0.600	0.0	0.0	0.0	0.0	0.0	0.100	0.200
18	1.000	1.100	1.700	1.600	0.500	0.0	0.0	0.0	0.0	0.0	0.100	0.200
19	1.000	1.100	2.000	1.400	0.400	0.0	0.0	0.0	0.0	0.0	0.100	0.200
20	1.000	1.100	1.700	1.100	0.400	0.129	0.0	0.0	0.0	0.0	0.100	0.200
21	1.000	1.100	1.700	1.100	0.300	3.519	0.0	0.0	0.0	0.0	0.100	0.200
22	1.000	1.200	1.700	1.100	0.300	0.800	0.0	0.0	5.298	0.0	0.100	0.100
23	1.200	1.300	1.500	1.100	0.945	0.500	0.0	0.0	3.100	0.0	0.100	0.100
24	1.300	1.300	1.500	1.000	1.700	0.200	0.0	0.0	0.800	0.0	0.100	0.100
25	1.400	1.300	1.500	1.100	1.000	0.200	0.0	0.0	0.075	0.0	0.100	0.100
26	1.200	1.200	1.300	1.300	0.700	0.100	0.0	0.0	0.0	0.0	0.100	0.100
27	1.100	1.200	1.300	1.400	0.600	0.0	0.0	0.0	0.0	0.0	0.100	0.200
28	1.100	1.300	2.400	1.500	0.700	0.0	0.0	0.0	0.0	0.0	0.100	0.200
29	1.100		2.100	1.500	0.900	0.0	0.0	0.0	0.0	0.0	0.100	0.200
30	1.000		1.700	4.558	0.500	0.0	0.0	0.0	0.0	0.0	0.100	0.200
31	0.900		1.700		0.500		0.0	0.0		0.0		0.100
MEAN	1.0677	1.1321	1.6740	1.5919	0.8836	0.6869	0.0025	0.0	0.3091	0.0	0.0900	0.1355
INCHES	0.047	0.045	0.074	0.068	0.039	0.029	0.000	0.0	0.013	0.0	0.004	0.006
STA AV	0.080	0.085	0.099	0.150	0.175	0.068	0.036	0.016	0.051	0.029	0.068	0.062

NOTES: To convert mean daily discharge in CFS to IN/DAY, multiply by 0.001431. To convert discharge in inches to AC-FT, multiply by 1,386. STA AV based on 9 yr (1962-70) record period.

CHICKASHA, OKLAHOMA WATERSHED 131 NEAR ANADARKO

LOCATION: Delaware Creek Watershed above County road bridge East of Anadarko in Caddo County, Okla.; tributary to Washita River; Red River Basin. GAGING STATION--NW1/4 sec. 29, T. 7 N., R. 9 W., lat 35 deg. 03 min., long. 98 deg. 10 min., 3 miles East and 1 mile South of Anadarko, Okla., at section line road bridge.

AREA: 25660.00 acres 40.10 sq. miles

MONTHLY PRECIPITATION AND RUNOFF (inches)													CHICKASHA, OKLAHOMA WATERSHED 131 NEAR ANADARKO												
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual												
1970 P	0.12	0.40	3.34	3.11	2.18	2.40	1.50	0.82	4.92	1.66	0.57	0.20	21.22												
Q	0.033	0.031	0.086	0.086	0.053	0.026	0.0	0.0	0.013	0.0	0.000	0.003	0.331												
STA AV P	0.75	1.12	1.54	2.89	3.90	2.80	1.89	2.46	4.04	1.74	2.15	0.83	26.11												
Q	0.051	0.063	0.079	0.114	0.155	0.032	0.004	0.003	0.014	0.009	0.027	0.034	0.584												
ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																									
	Maximum Discharge Date	1 Hour Date	2 Hours Date	6 Hours Date	12 Hours Date	1 Day Date	2 Days Date	8 Days Date																	
1970	6-20 0.007	6-20 0.006	6-20 0.010	6-20 0.015	6-20 0.018	6-20 0.020	4-30 0.024	4-26 0.036																	
MAXIMUMS FOR PERIOD OF RECORD																									
	5- 9 0.028	5- 9 0.028	5- 9 0.054	5- 9 0.112	5- 6 0.147	5- 6 0.173	5- 4 0.234	5- 4 0.333																	
	1968	1968	1968	1968	1969	1969	1969	1969																	

NOTES: Watershed conditions: From a 1967 survey; sowed crop - 8%; row crop - 4%; alfalfa - 2%; pasture and range - 71%; and miscellaneous - 15%. For maps of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1962, USDA Misc. Pub. 1070, p. 69.11-4 (Topography) and 1965, USDA Misc. Pub. 1216, p. 69.7-21 (Composite). Precipitation data obtained from a Thiessen weighted average of 10 gages on the watershed. Precipitation records began Oct. 1961; runoff records began Aug. 1962. For long-time precipitation records, see National Weather Service records at Chickasha, Okla.

1970	DAILY PRECIPITATION (inches)												CHICKASHA, OKLAHOMA WATERSHED 131 NEAR ANADARKO											
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec												
1	0.0	0.0	0.0	0.35	0.0	0.06	0.0	0.0	0.02	0.03	0.12	0.0												
2	0.0	0.0	0.0	0.0	0.0	0.02	0.0	0.0	0.15	0.0	0.0	0.0												
3	0.0	0.0	0.0	0.0	0.0	0.25	0.0	0.32	0.0	0.0	0.0	0.0												
4	0.0	0.0	0.0	0.19	0.0	0.08	0.0	0.0	0.0	0.0	0.0	0.0												
5	0.0	0.0	0.47	0.0	0.0	0.3	0.0	0.0	0.0	0.66	0.0	0.0												
6	3.0	0.0	1.10	0.0	0.0	0.0	0.06	0.0	0.0	3.0	0.0	0.0												
7	0.0	0.0	0.10	0.0	0.0	0.0	0.0	0.0	0.05	0.0	0.0	0.0												
8	0.0	0.02	0.0	0.0	0.0	3.0	0.0	0.0	0.07	0.60	0.0	0.0												
9	0.0	0.0	0.0	0.01	0.0	0.0	0.08	0.01	0.0	0.0	0.0	0.0												
10	3.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.01	0.0	0.0	0.0												
11	0.0	0.0	0.0	0.0	0.0	0.19	0.40	3.0	0.0	0.0	0.0	0.0												
12	0.0	0.0	0.04	0.0	0.0	0.0	0.13	0.0	0.0	0.0	0.0	0.0												
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.68	0.0	0.45	3.0												
14	0.0	0.0	0.0	0.0	1.62	0.0	0.0	0.0	0.06	0.0	0.0	0.0												
15	0.0	0.0	0.0	0.0	0.08	0.0	0.0	0.0	0.0	0.03	0.0	0.13												
16	0.0	0.0	0.53	0.43	0.0	0.0	0.0	0.0	0.32	0.10	3.0	0.0												
17	0.12	0.0	0.01	0.03	0.0	0.0	0.0	0.0	0.07	0.24	0.0	0.0												
18	0.0	0.0	0.02	0.03	0.0	0.0	0.0	0.04	0.0	0.0	0.0	0.0												
19	0.0	0.0	0.20	0.0	0.0	0.0	0.0	0.09	0.0	0.0	0.0	0.0												
20	0.0	0.0	0.0	0.0	0.0	1.80	0.27	0.38	0.0	0.0	0.0	0.04												
21	0.0	0.0	0.08	0.0	0.0	0.0	0.0	0.05	0.0	0.0	0.0	0.03												
22	0.0	0.16	0.0	0.0	0.0	0.0	0.0	0.06	3.40	0.0	0.0	0.0												
23	0.0	0.01	0.0	0.0	0.04	0.0	0.0	0.0	0.02	0.0	0.0	0.0												
24	0.0	0.05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0												
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0												
26	3.0	0.0	0.0	0.17	0.0	0.0	0.0	0.0	0.07	0.0	0.0	0.0												
27	0.0	0.10	0.0	0.0	0.02	0.3	0.01	0.0	0.0	0.0	0.0	0.0												
28	0.0	0.06	0.71	0.0	0.0	0.0	0.55	0.0	0.0	0.0	0.0	0.0												
29	0.0	0.0	0.0	0.95	0.42	0.0	0.0	0.0	0.0	0.0	0.0	0.0												
30	0.0	0.04	0.95	0.0	0.0	0.0	0.0	0.17	0.0	0.0	0.0	0.0												
31	0.0	0.04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0												
TOTAL	0.12	0.40	3.34	3.11	2.18	2.40	1.50	0.82	4.92	1.66	0.57	0.20												
STA AV	0.75	1.12	1.54	2.89	3.90	2.80	1.89	2.46	4.04	1.74	2.15	0.83												

NOTES: For daily air temperatures in the vicinity, see table for Watershed W-700, (69.007) of this publication. Precipitation values are a Thiessen weighted average of 10 rain gages on the watershed. STA AV based on 10 yr (1961-70) record period.

CHICKASHA, OKLAHOMA WATERSHED 131 NEAR ANADARKO												
1970	MEAN DAILY DISCHARGE (cfs)											
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	1.100	1.200	1.800	5.299	4.601	0.400	0.0	0.0	0.0	0.0	0.0	0.0
2	1.100	1.100	1.500	4.100	3.001	0.500	0.0	0.0	0.0	0.0	0.0	0.0
3	1.100	0.900	1.400	3.300	2.600	0.500	0.0	0.0	0.0	0.0	0.0	0.0
4	1.200	1.100	1.200	3.300	2.100	0.800	0.0	0.0	0.0	0.0	0.0	0.0
5	1.000	1.100	1.200	3.600	1.600	0.700	0.0	0.0	0.0	0.0	0.0	0.0
6	0.800	1.100	7.573	3.000	1.300	0.400	0.0	0.0	0.0	0.0	0.0	0.0
7	0.700	1.200	5.301	2.700	1.100	0.200	0.0	0.0	0.0	0.0	0.0	0.0
8	0.700	1.200	3.601	2.500	1.000	0.100	0.0	0.0	0.0	0.0	0.0	0.100
9	0.600	1.100	2.800	2.300	1.000	0.100	0.0	0.0	0.0	0.0	0.0	0.100
10	0.700	1.100	4.899	2.300	0.900	0.0 T	0.0	0.0	0.0	0.0	0.0	0.100
11	0.700	1.100	2.501	2.300	0.800	0.126	0.0	0.0	0.0	0.0	0.0	0.100
12	1.000	1.000	2.300	2.000	0.700	0.100	0.0	0.0	0.0	0.0	0.0	0.100
13	1.300	1.200	2.100	2.100	0.600	0.0 T	0.0	0.0	0.0	0.0	0.0	0.100
14	1.600	1.200	2.000	1.800	2.626	0.0	0.0	0.0	0.0	0.0	0.048	0.100
15	1.600	1.100	1.900	1.900	19.533	0.0	0.0	0.0	0.0	0.0	0.0 T	0.200
16	1.600	1.100	2.800	2.100	2.300	0.0	0.0	0.0	0.0	0.0	0.0	0.200
17	1.500	1.200	4.000	4.599	1.400	0.0	0.0	0.0	0.0	0.0	0.0	0.200
18	1.600	1.100	3.300	3.300	1.200	0.0	0.0	0.0	0.0	0.0	0.0	0.100
19	0.900	1.000	3.900	2.300	1.100	0.0	0.0	0.0	0.0	0.0	0.0	0.100
20	0.900	1.000	3.000	1.900	1.000	5.257	0.0	0.0	0.0	0.0	0.0	0.100
21	0.900	1.200	3.200	1.500	0.700	16.802	0.0	0.0	0.0	0.0	0.0	0.200
22	1.200	1.500	3.000	1.500	0.600	0.900	0.0	0.0	9.858	0.0	0.0	0.200
23	1.500	1.600	2.600	1.500	0.600	0.500	0.0	0.0	3.722	0.0	0.0	0.100
24	1.900	1.500	2.500	1.500	0.700	0.200	0.0	0.0	0.0 T	0.0	0.0	0.100
25	1.500	1.500	2.100	1.600	0.700	0.100	0.0	0.0	0.0	0.0	0.0	0.100
26	1.300	1.300	2.000	1.800	0.500	0.100	0.0	0.0	0.0	0.0	0.0	0.100
27	1.300	1.300	1.600	2.200	0.600	0.0 T	0.0	0.0	0.0	0.0	0.0	0.100
28	1.300	1.800	5.246	1.300	0.500	0.0	0.0	0.0	0.0	0.0	0.0	0.200
29	1.100		4.300	1.400	1.000	0.0	0.0	0.0	0.0	0.0	0.025	0.200
30	1.000		3.700	21.744	0.600	0.0	0.0	0.0	0.0	0.0	0.0	0.200
31	1.100		3.600		0.300		0.0	0.0		0.0		0.200
MEAN	1.1548	1.2071	2.9975	3.0915	1.8472	0.9262	0.0	0.0	0.4527	0.0	0.0024	0.1064
INCHES	0.033	0.031	0.086	0.086	0.053	0.026	0.0	0.0	0.013	0.0	0.000	0.003
STA AV	0.051	0.063	0.079	0.114	0.155	0.032	0.004	0.003	0.014	0.009	0.027	0.034

NOTES: To convert mean daily discharge in CFS to IN/DAY, multiply by 0.0009276. To convert discharge in inches to AC-FT, multiply by 2,138. STA AV based on 9 yr (1962-70) record period.

CHICKASHA, OKLAHOMA WATERSHED 411 AT CHICKASHA

LOCATION: Line Creek Watershed above U.S. Highway 81 bridge at Chickasha, Grady and Caddo Counties, Okla.; tributary to Washita River; Red River Basin. GAGING STATION--NE1/4 sec. 29, T. 7 N., R. 7 W., lat. 35 deg. 03 min., long. 97 deg. 58 min., Northwest edge of Chickasha, Okla., at U.S. Highway 81 bridge.

AREA: 33300.00 acres 52.00 sq. miles

MONTHLY PRECIPITATION AND RUNOFF (inches)										CHICKASHA, OKLAHOMA WATERSHED 411 AT CHICKASHA							
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual			
1970	P	0.10	0.40	2.74	4.24	2.70	1.57	1.41	0.59	4.65	1.75	0.59	0.21	20.95			
	Q	0.001	0.000	0.002	0.049	0.074	0.008	0.004	0.005	0.021	0.016	0.005	0.001	0.187			
STA AV	P	0.68	1.05	1.49	2.80	3.48	2.76	1.77	2.59	3.94	1.48	2.05	0.82	24.90			
	Q	0.003	0.004	0.006	0.063	0.085	0.024	0.010	0.044	0.029	0.006	0.029	0.005	0.309			
ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																	
		Maximum Discharge		1 Hour		2 Hours		Maximum Volume for Selected Time Interval		6 Hours		12 Hours		2 Days		8 Days	
		Date	Rate	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.
1970		4-30	0.003	4-30	0.003	4-30	0.006	4-30	0.019	4-30	0.035	4-30	0.058	4-29	0.081	4-26	0.104
MAXIMUMS FOR PERIOD OF RECORD																	
		8-28	0.060	8-28	0.053	8-28	0.096	8-28	0.204	8-28	0.274	8-28	0.302	8-28	0.316	5-4	0.437
		1965		1965		1965		1965		1965		1965		1965		1969	

NOTES: Watershed conditions: From a 1967 survey; sowed crop - 29%; row crop - 4%; alfalfa - 7%; pasture and range - 51%; and miscellaneous - 9%. For maps of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1962, USDA Misc. Pub. 1070, p. 69.12-4 (Topography) and 1965, USDA Misc. Pub. 1216, p. 69.7-21 (Composite). Precipitation data obtained from a Thiessen weighted average of 13 gages on the watershed. Precipitation records began Oct. 1961; runoff records began Sept. 1962. For long-time precipitation records, see National Weather Service records at Chickasha, Okla.

1970	DAILY PRECIPITATION (inches)												CHICKASHA, OKLAHOMA WATERSHED 411 AT CHICKASHA	
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
1	0.0	0.0	0.0	0.27	0.0	0.15	0.0	0.0	0.01	0.02	0.14	0.0		
2	0.0	0.0	0.0	0.0	0.0	0.01	0.0	0.0	0.03	0.0	0.0	0.0		
3	0.0	0.0	0.0	0.0	0.0	0.27	0.0	0.0	0.0	0.0	0.0	0.0		
4	0.0	0.0	0.0	0.18	0.0	0.13	0.0	0.0	0.0	0.0	0.0	0.0		
5	0.0	0.0	0.33	0.0	0.0	0.0	0.0	0.0	0.0	0.92	0.0	0.0		
6	0.0	0.0	0.88	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
7	0.0	0.0	0.08	0.0	0.0	0.0	0.0	0.0	0.03	0.02	0.0	0.0		
8	0.0	0.01	0.0	0.0	0.0	0.0	0.0	0.0	0.03	0.43	0.0	0.0		
9	0.0	0.0	0.0	0.01	0.0	0.0	0.04	0.07	0.0	0.0	0.0	0.0		
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
11	0.0	0.0	0.0	0.0	0.0	0.04	0.19	0.0	0.01	0.0	0.0	0.0		
12	0.0	0.0	0.03	0.0	0.0	0.0	0.37	0.0	0.0	0.0	0.0	0.0		
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.59	0.0	0.45	0.0		
14	0.0	0.0	0.0	0.0	1.22	0.0	0.0	0.0	0.04	0.0	0.0	0.0		
15	0.0	0.0	0.0	0.0	0.11	0.0	0.01	0.0	0.0	0.01	0.0	0.14		
16	0.0	0.0	0.53	0.36	0.0	0.0	0.0	0.0	0.48	0.06	0.0	0.0		
17	0.09	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.05	0.20	0.0	0.0		
18	0.01	0.0	0.92	0.03	0.0	0.0	0.0	0.10	0.0	0.0	0.0	0.0		
19	0.0	0.0	0.15	0.0	0.0	0.0	0.0	0.29	0.0	0.0	0.0	0.0		
20	0.0	0.0	0.0	0.0	0.0	0.97	0.25	0.03	0.0	0.0	0.0	0.01		
21	0.0	0.0	0.07	0.0	0.0	0.0	0.0	0.08	0.02	0.0	0.0	0.0		
22	0.0	0.10	0.0	0.01	0.0	0.0	0.0	0.02	3.27	0.09	0.0	0.0		
23	0.0	0.05	0.0	0.0	0.04	0.0	0.0	0.0	0.02	0.0	0.0	0.0		
24	0.0	0.07	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
26	0.0	0.0	0.0	0.20	0.0	0.0	0.0	0.0	0.07	0.0	0.0	0.0		
27	0.0	0.09	0.0	0.0	0.01	0.0	0.01	0.0	0.0	0.0	0.0	0.0		
28	0.0	0.08	0.59	0.0	0.03	0.0	0.54	0.0	0.0	0.0	0.0	0.0		
29	0.0		0.0	2.04	1.28	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
30	0.0		0.04	1.14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
31	0.0		0.02		0.01		0.0	0.0		0.0		0.0		
TOTAL	0.10	0.40	2.74	4.24	2.70	1.57	1.41	0.59	4.65	1.75	0.59	0.21		
STA AV	0.68	1.05	1.49	2.80	3.48	2.76	1.77	2.59	3.94	1.48	2.05	0.82		

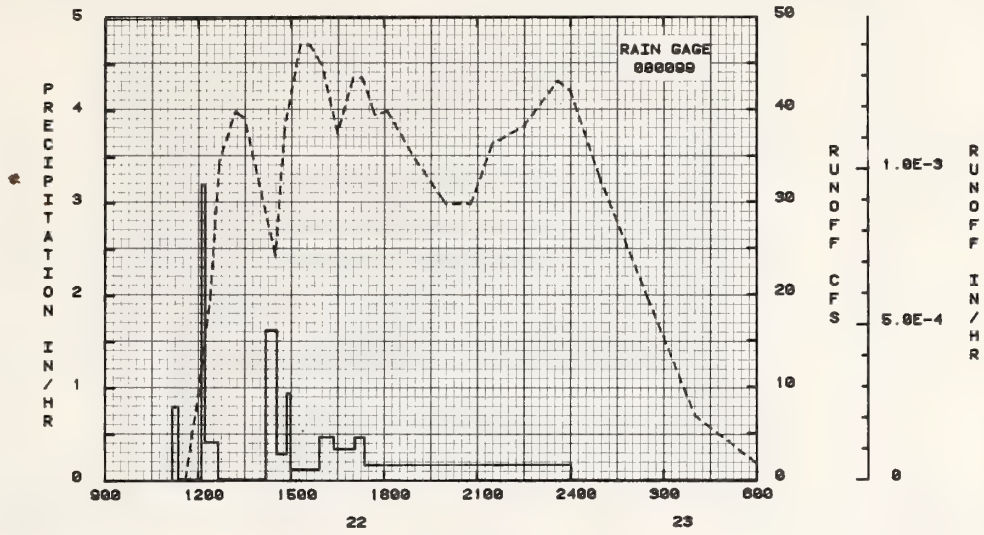
NOTES: For daily air temperatures in the vicinity, see table for Watershed W-700, (69.007) of this publication. Precipitation values are a Thiessen weighted average of 13 rain gages on the watershed. STA AV based on 10 yr (1961-70) record period.

1970 MEAN DAILY DISCHARGE (cfs) CHICKASHA, OKLAHOMA WATERSHED 411 AT CHICKASHA												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.158	0.0	0.0	0.188	49.298	0.708	0.100	0.0 T	0.0	0.200	0.444	0.100
2	0.463	0.0	0.0	0.0	17.400	0.100	0.100	0.0	0.100	0.200	0.200	0.200
3	0.171	0.0	0.0	0.0	9.270	1.377	0.100	0.100	0.0 T	0.200	0.200	0.100
4	0.076	0.0	0.0	0.170	2.078	0.871	0.100	0.100	0.0	0.200	0.200	0.100
5	0.0	0.0	0.0	0.0	0.200	0.100	0.100	0.100	0.0	7.708	0.200	0.100
6	0.0	0.0	1.787	0.0	0.200	0.100	0.100	0.100	0.0	0.200	0.200	0.0 T
7	0.0	0.0	0.236	0.0	0.200	0.100	0.100	0.100	0.007	0.200	0.100	0.100
8	0.0	0.0	0.0	0.0	0.200	0.100	0.0 T	0.0 T	0.0	5.537	0.0 T	0.100
9	0.0	0.0	0.0	0.0	0.100	0.100	0.697	0.108	0.273	0.200	0.0	0.100
10	0.145	0.0	0.0	0.0	0.200	0.100	0.147	0.100	0.100	0.200	0.0	0.100
11	0.025	0.0	0.0	0.0	0.200	0.100	0.0	0.100	0.100	0.200	0.0	0.0 T
12	0.0	0.0	0.0	0.0	0.200	0.100	1.675	0.100	0.100	0.200	0.200	0.0
13	0.0	0.0	0.0	0.0	0.200	0.100	0.0 T	0.100	1.987	0.200	3.753	0.0
14	0.0	0.0	0.0	0.034	4.594	0.100	0.0	0.100	0.100	0.200	0.200	0.100
15	0.0	0.0	0.0	0.0	3.285	0.100	0.0	0.100	0.100	0.200	0.100	0.534
16	0.0	0.0	0.509	0.344	0.200	0.100	0.0	0.100	0.200	0.200	0.200	0.100
17	0.038	0.0	0.042	0.015	0.200	0.100	0.0	0.100	0.200	1.201	0.200	0.0 T
18	0.0	0.0	0.0	0.0	0.200	0.100	0.0	1.066	0.200	0.200	0.200	0.0
19	0.0	0.0	0.165	0.0	0.200	0.100	0.0	3.038	0.200	0.200	0.100	0.0
20	0.0	0.0	0.0	0.0	0.200	5.438	0.230	0.100	0.200	0.200	0.100	0.0
21	0.0	0.0	0.042	0.0	0.200	0.587	0.100	0.100	0.200	0.200	0.100	0.100
22	0.0	0.065	0.0	0.0	0.200	0.200	0.0 T	0.100	18.354	2.595	0.100	0.0 T
23	0.0	0.066	0.0	0.0	0.100	0.200	0.486	0.100	5.105	0.200	0.100	0.0
24	0.0	0.050	0.0	0.0	0.200	0.200	0.0 T	0.100	0.600	0.200	0.100	0.0
25	0.0	0.0	0.0	0.0	0.200	0.100	0.0	0.100	0.200	0.200	0.100	0.0
26	0.0	0.0	0.0	1.957	0.200	0.100	0.579	0.100	0.200	0.200	0.100	0.0
27	0.0	0.0	0.0	0.169	0.100	0.100	0.0	0.100	0.200	0.200	0.100	0.0
28	0.0	0.232	0.701	0.0	0.200	0.100	0.276	0.0 T	0.200	0.200	0.100	0.100
29	0.0	0.0	0.0	1.971	6.615	0.100	0.0	0.0	0.200	0.200	0.100	0.0 T
30	0.0	0.0	0.0	63.779	5.200	0.100	0.100	0.0	0.200	0.200	0.100	0.0
31	0.0	0.0	0.0	0.0	1.201	0.100	0.0	0.0	0.200	0.200	0.100	0.0
MEAN	0.0387	0.0147	0.1123	2.2876	3.3238	0.3927	0.1642	0.2036	0.9775	0.7239	0.2532	0.0624
INCHES	0.001	0.000	0.002	0.049	0.074	0.008	0.004	0.005	0.021	0.016	0.005	0.001
STA AV	0.003	0.004	0.006	0.063	0.085	0.024	0.010	0.044	0.029	0.006	0.029	0.005

NOTES: To convert mean daily discharge in CFS to IN/DAY, multiply by 0.0007148. To convert discharge in inches to AC-FT, multiply by 2,775. STA AV based on 9 yr (1962-70) record period.

1970	SELECTED RUNOFF EVENT			CHICKASHA, OKLAHOMA				WATERSHED 411 AT CHICKASHA			
ANTECEDENT CONDITIONS			RAINFALL				RUNOFF				
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.	
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)	
EVENT OF SEPTEMBER 22 - 23, 1970											
PG 000099			RG 000099								
9-22	0.0	0.0	9-22	1110	0.0	0.0	9-22	1136	0.200	0.0	
				1122	0.8900	0.16		1200	9.200	0.0001	
				1207	0.0133	0.17		1224	19.900	0.0003	
				1213	3.2000	0.49		1242	34.700	0.0005	
				1239	0.4154	0.67		1312	39.900	0.0011	
WATERSHED CONDITIONS: From a 1967 survey; sowed crop - 29%; row crop - 4%; alfalfa - 7%; pasture and range - 51%; and miscel- laneous - 9%.				1412	0.0129	0.69		1330	39.200	0.0015	
				1433	1.6286	1.26		1430	24.300	0.0024	
				1452	0.2842	1.35		1448	38.200	0.0027	
				1459	0.9429	1.46		1518	47.100	0.0033	
				1555	0.1179	1.57		1536	47.100	0.0037	
				1623	0.8714	1.79		1600	44.900	0.0043	
				1704	0.3366	2.02		1630	37.500	0.0049	
				1722	0.4667	2.16		1700	43.500	0.0055	
				2136	0.1654	2.86		1718	43.500	0.0059	
				9-23	1	0.1655	3.26		1742	39.500	0.0064
							1806	39.900	0.0069		
							1900	34.700	0.0079		
							2000	29.800	0.0089		
							2048	29.800	0.0096		
							2130	36.400	0.0103		
								2230	38.200	0.0114	
								2336	43.100	0.0127	
								2400	42.000	0.0132	
							9-23	100	32.100	0.0143	
								230	19.600	0.0155	

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.00002978.



EVENT OF SEPTEMBER 22 - 23, 1970

CHICKASHA, OKLAHOMA WATERSHED 411 AT CHICKASHA

CHICKASHA, OKLAHOMA WATERSHED 511 NEAR TABLER

LOCATION: West Bitter Creek Watershed above U.S. Highway 62 bridge, East of Chickasha in Grady County, Okla.; tributary to Washita River; Red River Basin. GAGING STATION--SW1/4 sec. 29, T. 7 N., R. 6 W., lat. 35 deg. 03 min., long. 97 deg. 51 min., 4 miles East of Chickasha, Okla., at U.S. highway 62 bridge.

AREA: 38020.00 acres 59.40 sq. miles

MONTHLY PRECIPITATION AND RUNOFF (inches)														CHICKASHA, OKLAHOMA WATERSHED 511 NEAR TABLER											
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual											
1970	P	0.08	0.44	2.10	3.95	4.51	1.23	1.81	1.95	5.46	2.45	0.84	0.34	25.16											
	Q	0.040	0.029	0.041	0.362	0.774	0.081	0.002	0.019	0.291	0.086	0.013	0.019	1.758											
STA AV	P	0.73	1.09	1.82	3.03	3.23	2.86	1.95	3.40	3.87	1.53	2.02	0.91	26.42											
	Q	0.042	0.044	0.087	0.332	0.251	0.138	0.023	0.172	0.199	0.034	0.085	0.046	1.452											
ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																									
		Maximum Discharge Date	Rate	1 Hour Date	Vol.	2 Hours Date	Vol.	6 Hours Date	Vol.	12 Hours Date	Vol.	1 Day Date	Vol.	2 Days Date	Vol.	8 Days Date	Vol.								
1970		5-29	0.074	5-29	0.073	5-29	0.144	5-29	0.351	5-29	0.432	5-29	0.479	5-29	0.518	5-29	0.581								
MAXIMUMS FOR PERIOD OF RECORD																									
		4-12 1967	0.086	4-12 1967	0.086	4-12 1967	0.169	4-12 1967	0.460	4-12 1967	0.606	4-12 1967	0.670	4-12 1967	0.784	4-9 1967	0.896								

NOTES: Watershed conditions: From a 1967 survey; sowed crop - 21%; row crop - 5%; alfalfa - 3%; pasture and range - 63%; and miscellaneous - 8%. For maps of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1965, USDA Misc. Pub. 1216, p. 69.13-11 (Topography) and p. 69.7-21 (Composite). Precipitation records began Oct. 1961; runoff records began Oct. 1962. For long-time precipitation records, see National Weather Service records at Chickasha, Okla.

1970		DAILY PRECIPITATION (inches)					CHICKASHA, OKLAHOMA WATERSHED 511 NEAR TABLER							
	Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
	1	0.0	0.0	0.0	0.13	0.0	0.17	0.0	0.0	0.0	0.03	0.16	0.0	
	2	0.0	0.0	0.02	0.0	0.0	0.03	0.0	0.0	0.04	0.0	0.0	0.0	
	3	0.0	0.0	0.0	0.0	0.0	0.65	0.01	0.0	0.11	0.0	0.0	0.0	
	4	0.0	0.0	0.0	0.25	0.0	0.18	0.0	0.0	0.0	0.0	0.0	0.0	
	5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.24	0.0	0.0	
	6	0.0	0.0	0.68	0.0	0.0	0.0	0.04	0.0	0.0	0.0	0.0	0.0	
	7	0.0	0.01	0.04	0.0	0.0	0.0	0.0	0.0	0.03	0.15	0.0	0.0	
	8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.01	0.64	0.0	0.0	
	9	0.0	0.0	0.0	0.0	0.0	0.0	0.09	0.0	0.0	0.0	0.0	0.0	
	10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	11	0.0	0.0	0.0	0.0	0.0	0.04	0.02	0.0	0.03	0.0	0.0	0.0	
	12	0.0	0.0	0.0	0.0	0.0	0.0	0.54	0.0	0.0	0.0	0.0	0.0	
	13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.39	0.0	0.67	0.0	
	14	0.0	0.0	0.0	0.0	1.80	0.0	0.0	0.0	0.24	0.0	0.01	0.0	
	15	0.0	0.0	0.0	0.0	0.09	0.0	0.0	0.0	0.0	0.0	0.0	0.27	
	16	0.0	0.0	0.49	0.61	0.0	0.0	0.0	0.0	0.31	0.02	0.0	0.0	
	17	0.07	0.0	0.01	0.03	0.0	0.0	0.0	0.0	0.13	0.17	0.0	0.0	
	18	0.01	0.0	0.02	0.05	0.0	0.0	0.0	0.98	0.0	0.0	0.0	0.0	
	19	0.0	0.0	0.13	0.0	0.0	0.0	0.0	0.88	0.0	0.0	0.0	0.0	
	20	0.0	0.0	0.0	0.0	0.0	0.16	0.20	0.0	0.0	0.0	0.0	0.01	
	21	0.0	0.0	0.07	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.06	
	22	0.0	0.18	0.0	0.0	0.0	0.0	0.0	0.09	4.05	0.15	0.0	0.0	
	23	0.0	0.06	0.0	0.0	0.0	0.0	0.0	0.0	0.08	0.05	0.0	0.0	
	24	0.0	0.05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	26	0.0	0.0	0.0	0.27	0.0	0.0	0.0	0.0	0.04	0.0	0.0	0.0	
	27	0.0	0.03	0.0	0.0	0.03	0.0	0.08	0.0	0.0	0.0	0.0	0.0	
	28	0.0	0.11	0.57	0.0	0.01	0.0	0.83	0.0	0.0	0.0	0.0	0.0	
	29	0.0		0.0	1.02	2.55	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	30	0.0		0.07	1.59	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	31	0.0		0.0		0.03		0.0	0.0		0.0		0.0	
	TOTAL	0.08	0.44	2.10	3.95	4.51	1.23	1.81	1.95	5.46	2.45	0.84	0.34	
	STA AV	0.73	1.09	1.82	3.03	3.23	2.86	1.95	3.40	3.87	1.53	2.02	0.91	

NOTES: For daily air temperatures in the vicinity, see table for Watershed W-700, (69.007) of this publication. Precipitation values are a Thiessen weighted average of 15 rain gages on the watershed. STA AV based on 10 yr (1961-70) record period.

1970		MEAN DAILY DISCHARGE (cfs)					CHICKASHA, OKLAHOMA WATERSHED 511 NEAR TAFLER							
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
1	2.20	1.70	2.10	2.30	59.87	18.30	0.0 T	0.0	0.0	0.29	0.30	0.90		
2	2.20	1.70	2.10	2.10	25.61	13.30	0.0	0.0	0.0	0.30	0.20	0.80		
3	2.30	1.60	2.00	2.00	16.10	8.20	0.0	0.0	0.0	0.20	0.20	0.90		
4	2.20	1.50	1.90	1.80	12.10	27.82	0.0	0.0	0.0	0.10	0.40	0.70		
5	2.10	1.50	1.70	2.00	7.00	13.70	0.0	0.0	0.0	38.48	0.40	0.60		
6	1.50	1.70	2.60	2.30	5.10	8.20	0.0	0.0	0.0	24.23	0.50	1.20		
7	1.50	1.70	3.70	2.00	4.00	5.50	0.0	0.0	0.0	3.10	0.50	0.80		
8	1.50	1.80	2.70	1.60	3.40	4.70	0.0	0.0	0.9	40.84	0.70	0.80		
9	1.30	1.70	2.20	1.50	3.20	3.80	0.0	0.0	0.0	15.01	0.50	0.90		
10	1.30	1.60	1.80	1.50	2.80	3.20	0.0	0.0	0.0	2.80	0.40	1.00		
11	1.50	1.70	1.70	1.40	2.60	3.20	0.0	0.0	0.0	1.30	0.40	0.90		
12	1.70	1.50	1.70	1.40	2.20	3.20	0.0	0.0	0.0	0.90	0.30	0.80		
13	2.30	1.60	1.60	1.30	1.90	2.80	0.0	0.0	0.0	0.60	0.50	0.90		
14	2.60	1.70	1.50	1.20	1.80	2.20	0.0	0.0	0.0	0.60	3.49	0.90		
15	2.70	1.70	1.50	1.20	182.25	2.10	0.0	0.0	0.0	0.40	1.60	1.00		
16	3.00	1.60	1.90	1.50	20.59	1.70	0.0	0.0	0.0	0.30	1.00	1.30		
17	3.00	1.50	2.60	8.36	9.00	1.40	0.0	0.0	0.0	0.40	0.90	1.30		
18	2.00	1.40	2.80	5.50	5.70	0.80	0.0	0.0	0.0	0.60	0.80	1.20		
19	1.80	1.40	2.60	3.10	3.70	0.60	0.0	26.76	0.0	0.60	0.70	1.10		
20	1.90	1.20	2.30	2.00	3.00	0.60	0.0	2.63	0.0	0.40	0.60	1.00		
21	1.90	1.20	2.30	1.40	2.40	0.70	0.0	0.20	0.0	0.30	0.60	1.00		
22	1.90	1.50	2.10	1.50	2.10	0.60	0.0	0.0 T	240.14	0.50	0.60	1.20		
23	2.00	1.90	2.00	1.50	1.90	0.50	0.0	0.0	212.07	1.00	0.30	1.30		
24	2.30	2.30	1.90	1.50	1.80	0.40	0.0	0.0	8.66	1.00	0.20	1.20		
25	2.80	2.20	1.80	1.50	1.90	0.40	0.0	0.0	1.90	1.20	0.30	1.00		
26	2.80	1.80	1.60	1.60	1.40	0.40	0.0	0.0	0.80	0.60	0.70	1.00		
27	2.30	1.70	1.50	2.00	1.30	0.30	0.0	0.0	0.60	0.30	1.00	1.00		
28	2.20	2.00	1.90	2.30	1.50	0.20	0.0	0.0	0.40	0.20	0.80	1.00		
29	2.10		3.00	1.60	745.57	0.10	3.42	0.0	0.30	0.20	0.70	1.00		
30	1.80		2.70	517.93	75.21	0.10	0.35	0.0	0.20	0.20	0.80	1.00		
31	1.70		2.30		29.16		0.0 T	0.0		0.30		1.00		
MEAN	2.077	1.657	2.132	19.296	39.877	4.301	0.122	0.954	15.502	4.425	0.680	0.990		
INCHES	0.040	0.029	0.041	0.362	0.774	0.081	0.002	0.019	0.291	0.086	0.013	0.019		
STA AV	0.042	0.044	0.087	0.332	3.251	0.138	0.023	0.172	0.199	0.334	0.085	0.046		

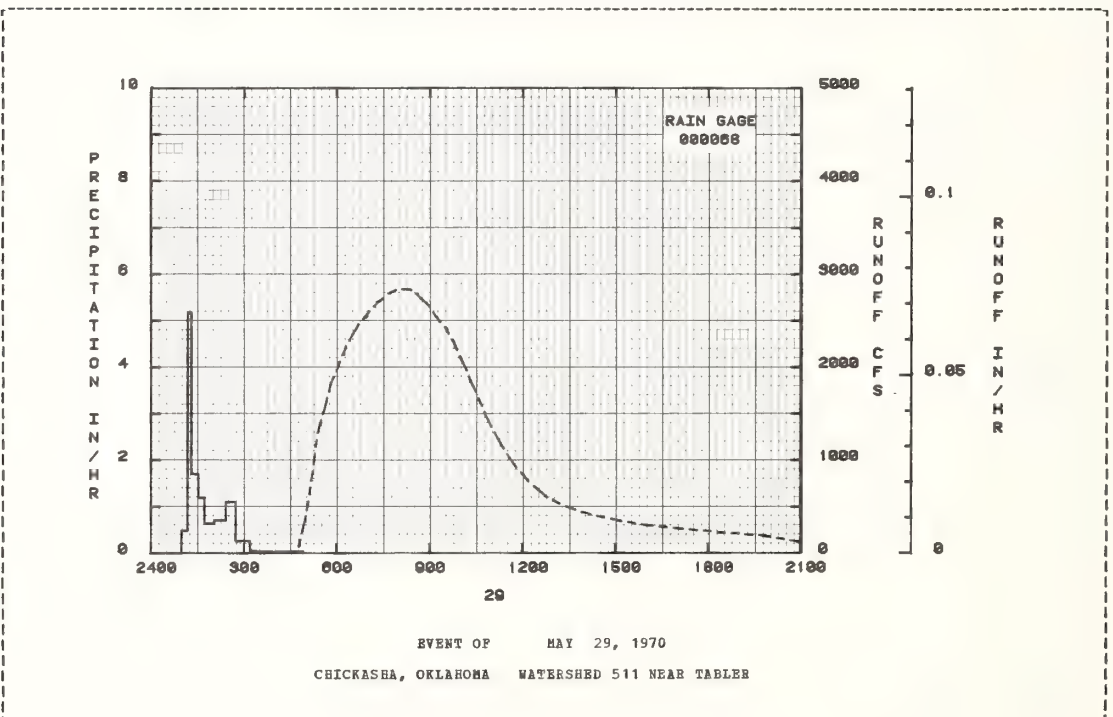
NOTES: To convert mean daily discharge in CPS to IN/DAY, multiply by 0.0006260. To convert discharge in inches to AC-FT, multiply by 3,168. STA AV based on 9 yr (1962-70) record period.

1970	SELECTED RUNOFF EVENT			CHICKASHA, OKLAHOMA				WATERSHED 511 NEAR TABLEE		
ANTECEDENT CONDITIONS			RAINFALL				RUNOFF			
Date Mo-Day	Rainfall (inches)	Runoff (inches)	Date Mo-Day	Time of Day	Intensity (in/hr)	Acc. (inches)	Date Mo-Day	Time of Day	Rate (cfs)	Acc. (inches)
EVENT OF MAY 29, 1970										
RG 000068			RG 000068							
5-29	0.0	0.000	5-29	100	0.0	0.0	5-29	430	3.000	0.0
				111	0.4909	0.09		442	8.200	0.0
				119	5.1750	0.78		448	74.400	0.0001
				132	1.7077	1.15		454	249.900	0.0005
				144	1.2000	1.39		500	393.698	0.0013
WATERSHED CONDITIONS:				203	0.6316	1.59		506	559.898	0.0025
From a 1967 survey; sowed				225	0.7091	1.85		512	809.600	0.0043
crop - 21%; row crop - 5%;				244	1.1053	2.20		518	1071.898	0.0068
alfalfa - 3%; pasture and				312	0.2571	2.32		524	1299.898	0.0099
range - 63%; and miscel-				456	0.0404	2.39		530	1429.398	0.0135
laneous - 8%.								536	1547.898	0.0174
								542	1670.000	0.0216
								548	1810.100	0.0261
								554	1896.300	0.0309
								600	1954.600	0.0359
								606	2058.398	0.0411
								612	2146.100	0.0466
								618	2222.800	0.0523
								630	2351.000	0.0642
								642	2459.497	0.0767
								654	2540.396	0.0897
								718	2695.595	0.1170
								742	2799.896	0.1457
								754	2830.496	0.1604
								806	2840.696	0.1752
								824	2830.496	0.1974
								842	2745.795	0.2192
								900	2648.996	0.2403
								912	2540.396	0.2538
								930	2427.295	0.2732
								948	2253.800	0.2915
								1000	2100.600	0.3029
								1012	1966.398	0.3135
								1018	1864.500	0.3185
								1030	1736.698	0.3279

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.00002608.

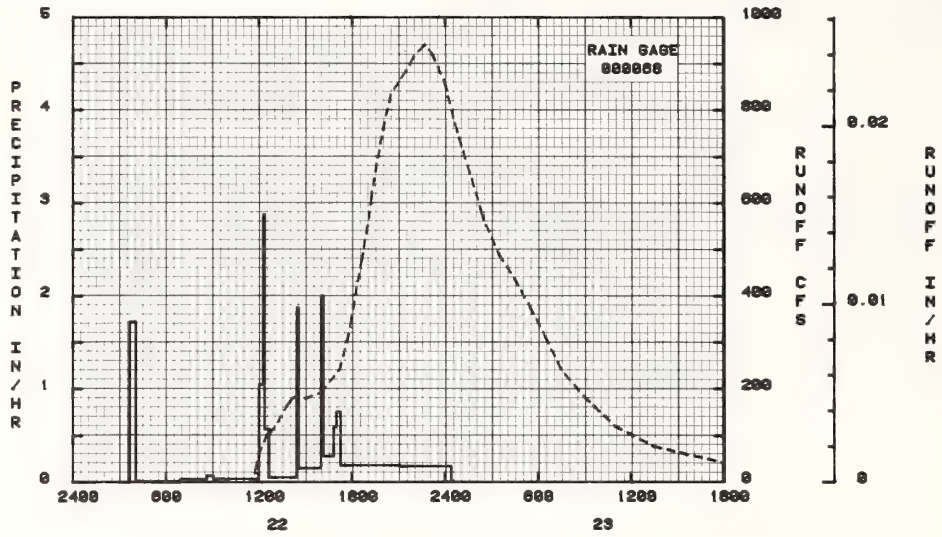
1970	SELECTED RUNOFF EVENT			CHICKASHA, OKLAHOMA			WATERSHED 511 NEAR TABLER			
ANTECEDENT CONDITIONS			RAINFALL			RUNOFF				
Date Mo-Day	Rainfall (inches)	Runoff (inches)	Date Mo-Day	Time of Day	Intensity (in/hr)	Acc. (inches)	Date Mo-Day	Time of Day	Rate (cfs)	Acc. (inches)
EVENT OF MAY 29, 1970 (CONTINUED)										
							5-29	1036	1639.800	0.3323
								1042	1585.500	0.3365
								1048	1492.100	0.3405
								1100	1362.800	0.3480
								1112	1238.198	0.3548
								1124	1125.398	0.3610
								1136	1021.600	0.3666
								1148	921.800	0.3717
								1200	851.300	0.3763
								1212	772.898	0.3805
								1230	685.898	0.3862
								1248	605.000	0.3912
								1300	565.198	0.3943
								1330	490.600	0.4012
								1412	414.000	0.4095
								1512	344.100	0.4194
								1600	299.300	0.4261
								1712	257.800	0.4348

NOTES: To convert runoff in CPS to IN/HR, multiply by 0.00002608.



1970	SELECTED RUNOFF EVENT			CHICKASHA, OKLAHOMA WATERSHED 511 NEAR TABLER						
ANTECEDENT CONDITIONS			RAINFALL				RUNOFF			
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)
EVENT OF SEPTEMBER 22 - 23, 1970										
RG 000068			RG 000068							
9-22	0.0	0.0	9-22	340	0.0	0.0	9-22	1136	0.0	0.0
				404	1.7250	0.69		1142	4.900	0.0
				657	0.0069	0.71		1148	29.100	0.0
				839	0.0353	0.77		1200	60.100	0.0002
				905	0.0692	0.80		1230	101.000	0.0013
WATERSHED CONDITIONS:				1201	0.0341	0.90		1300	116.800	0.0027
From a 1967 survey; sowed				1217	1.0500	1.18		1348	163.600	0.0056
crop - 21%; row crop - 5%;				1222	2.8800	1.42		1412	181.400	0.0074
alfalfa - 3%; pasture and				1241	0.5684	1.60		1418	182.900	0.0079
range - 63%; and miscel-				1427	0.0509	1.69		1430	181.400	0.0089
laneous - 8%.				1435	1.8750	1.94		1500	179.900	0.0113
				1601	0.1465	2.15		1600	192.700	0.0162
				1610	2.0001	2.45		1712	242.100	0.0230
				1649	0.2769	2.63		1742	304.500	0.0266
				1701	0.6000	2.75		1800	357.398	0.0292
				1717	0.7500	2.95		1818	417.100	0.0322
				2106	0.1782	3.63		1842	490.600	0.0370
			9-23	25	0.1658	4.18		1900	551.000	0.0411
								1918	623.500	0.0456
								1936	684.000	0.0507
								2000	758.800	0.0583
								2030	832.398	0.0687
								2130	885.198	0.0911
								2200	915.300	0.1028
								2242	941.398	0.1197
								2312	919.698	0.1318
								2400	857.600	0.1504
							9-23	48	752.800	0.1671
								136	664.898	0.1819
								230	565.198	0.1964
								330	487.300	0.2101
								430	436.300	0.2221
								530	375.398	0.2327
								630	311.500	0.2417
								730	242.100	0.2489
								900	182.900	0.2572
								1100	119.100	0.2651
								1330	76.200	0.2715
								1800	41.000	0.2784

NOTES: To convert runoff in CPS to IN/HR, multiply by 0.00002608.



EVENT OF SEPTEMBER 22 - 23, 1970
CHICKASHA, OKLAHOMA WATERSHED 511 NEAR TABLER

CHICKASHA, OKLAHOMA WATERSHED 110 NEAR ANADARKO

LOCATION: Tonkawa Creek Watershed above county road East-Northeast of Anadarko, in Caddo County, Okla.; tributary to Washita River: Red River Basin. GAGING STATION--NE 1/4 sec. 18, T. 7 N., R. 9 W., lat. 35 deg. 05 min., long. 98 deg. 11 min., 2-1/2 miles East of Anadarko, Okla., on upstream side of section line road bridge.

AREA: 25020.00 acres 39.10 sq. miles

MONTHLY PRECIPITATION AND RUNOFF (inches)						CHICKASHA, OKLAHOMA		WATERSHED 110 NEAR ANADARKO											
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual					
1970	P	0.08	0.36	3.17	2.57	1.89	3.23	1.55	1.51	5.06	1.38	0.49	0.21	21.50					
	Q	0.0	0.0	0.0	0.001	0.000	0.002	0.000	0.001	0.002	0.000	0.0	0.0	0.006					
STA AV	P	0.62	1.02	1.47	2.76	3.54	3.01	1.79	2.45	3.96	1.53	1.92	0.75	24.82					
	Q	0.0	0.002	0.004	0.027	0.068	0.005	0.000	0.001	0.000	0.000	0.003	0.0	0.110					
ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																			
		Maximum Discharge		1 Hour		2 Hours		Maximum Volume for Selected Time Interval		6 Hours		12 Hours		1 Day		2 Days		8 Days	
		Date	Rate	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.
1970		6-11	0.001	6-11	0.000	6-11	0.001	6-11	0.001	6-11	0.002	6-11	0.002	6-10	0.002	6-4	0.002		
MAXIMUMS FOR PERIOD OF RECORD																			
		5-11	0.004	5-11	0.004	5-11	0.007	5-11	0.021	5-11	0.038	5-6	0.070	5-6	0.127	5-4	0.278		
		1964		1964		1964		1964		1964		1969		1969		1969			

NOTES: Watershed conditions: From a 1967 survey; sowed crop - 27%; row crop - 6%; alfalfa - 10%; pasture and range - 33%; and miscellaneous - 24%. For maps of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1962, USDA Misc. Pub. 1070, p. 69.10-4 (Topography) and 1965, USDA Misc. Pub. 1216, p. 69.7-21 (Composite). Precipitation data obtained from a Thiessen weighted average of 10 gages on the watershed. Precipitation records began Oct. 1961; runoff records began April 1963. For long-time precipitation records, see National Weather Service records at Chickasha, Okla.

1970 DAILY PRECIPITATION (inches)													CHICKASHA, OKLAHOMA WATERSHED 110 NEAR ANADARKO	
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
1	0.0	0.0	0.0	0.36	0.0	0.05	0.0	0.0	0.0	0.04	0.10	0.0		
2	0.0	0.0	0.0	0.0	0.0	0.02	0.0	0.0	0.05	0.0	0.0	0.0		
3	0.0	0.0	0.0	0.0	0.0	0.24	0.0	0.0	0.0	0.0	0.0	0.0		
4	0.0	0.0	0.0	0.19	0.0	0.18	0.0	0.0	0.0	0.0	0.0	0.0		
5	0.0	0.0	0.67	0.0	0.0	0.0	0.0	0.0	0.0	0.59	0.0	0.0		
6	0.0	0.0	0.88	0.0	0.0	0.0	0.04	0.0	0.0	0.0	0.0	0.0		
7	0.0	0.0	0.02	0.0	0.0	0.0	0.0	0.0	0.12	0.0	0.0	0.0		
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.66	0.38	0.0	0.0		
9	0.0	0.0	0.0	0.0	0.0	0.0	0.08	0.0	0.0	0.0	0.0	0.0		
10	0.0	0.0	0.0	0.0	0.0	0.0	0.01	0.0	0.01	0.0	0.0	0.0		
11	0.0	0.0	0.0	0.0	0.0	1.37	0.58	0.0	0.0	0.0	0.0	0.0		
12	0.0	0.0	0.02	0.0	0.0	0.0	0.08	0.0	0.0	0.0	0.0	0.0		
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.89	0.0	0.39	0.0		
14	0.0	0.0	0.0	0.0	1.27	0.0	0.0	0.0	0.05	0.0	0.0	0.0		
15	0.0	0.0	0.0	0.0	0.04	0.0	0.0	0.0	0.0	0.01	0.0	0.0		0.16
16	0.0	0.0	0.50	0.49	0.0	0.0	0.0	0.0	0.33	0.11	0.0	0.0		
17	0.08	0.0	0.01	0.03	0.0	0.0	0.0	0.0	0.01	0.25	0.0	0.0		
18	0.0	0.0	0.03	0.01	0.0	0.0	0.0	0.03	0.0	0.0	0.0	0.0		
19	0.0	0.0	0.19	0.0	0.0	0.0	0.0	0.09	0.0	0.0	0.0	0.0		
20	0.0	0.0	0.0	0.0	0.0	1.37	0.23	0.64	0.0	0.0	0.0	0.0		0.03
21	0.0	0.0	0.07	0.0	0.0	0.0	0.0	0.25	0.0	0.0	0.0	0.0		0.02
22	0.0	0.17	0.0	0.0	0.0	0.0	0.0	0.27	2.85	0.0	0.0	0.0		
23	0.0	0.01	0.0	0.0	0.02	0.0	0.0	0.0	0.02	0.0	0.0	0.0		
24	0.0	0.05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.04	0.0	0.0	0.0		
26	0.0	0.0	0.0	0.10	0.0	0.0	0.0	0.0	0.03	0.0	0.0	0.0		
27	0.0	0.07	0.0	0.0	0.05	0.0	0.04	0.0	0.0	0.0	0.0	0.0		
28	0.0	0.06	0.66	0.0	0.05	0.0	0.49	0.0	0.0	0.0	0.0	0.0		
29	0.0	0.0	0.0	0.53	0.46	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
30	0.0	0.06	0.86	0.0	0.0	0.0	0.0	0.23	0.0	0.0	0.0	0.0		
31	0.0	0.06	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
TOTAL	0.08	0.36	3.17	2.57	1.89	3.23	1.55	1.51	5.06	1.38	0.49	0.21		
STA AV	0.62	1.02	1.47	2.76	3.54	3.01	1.79	2.45	3.96	1.53	1.92	0.75		

NOTES: For daily air temperatures in the vicinity, see table for Watershed #700, (69.007) of this publication. Precipitation values are a Thiessen weighted average of 10 rain gages on the watershed. STA AV based on 10 yr (1961-70) record period.

1970 MEAN DAILY DISCHARGE (cfs) CHICKASAW, OKLAHOMA WATERSHED 110 NEAR ANADARKO												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.239	0.0	0.0
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.112	0.0	0.0
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11	0.0	0.0	0.0	0.0	0.0	1.702	0.0	0.0	0.0	0.0	0.0	0.0
12	0.0	0.0	0.0	0.0	0.0	0.187	0.0	0.0	0.0	0.0	0.0	0.0
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.773	0.0	0.0	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.370	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.335	0.0	0.0	0.0
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.537	0.0	0.0	0.0
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	0.0	0.0	0.0	0.0	0.0	0.0	0.195	0.0	0.0	0.0	0.0	0.0
29	0.0	0.0	0.0	0.121	0.451	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	0.0	0.0	0.0	0.734	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MEAN	0.0	0.0	0.0	0.0285	0.0146	0.0630	0.0063	0.0369	0.0624	0.0113	0.0	0.0
INCHES	0.0	0.0	0.0	0.001	0.000	0.002	0.000	0.001	0.002	0.000	0.0	0.0
STA AV	0.0	0.002	0.004	0.027	0.068	0.005	0.000	0.001	0.000	0.000	0.003	0.0

NOTES: To convert mean daily discharge in CFS to IN/DAY, multiply by .0009513. To convert discharge in inches to AC-FT, multiply by 2,085. STA AV based on 8 yr (1963-70) record period.

CHICKASHA, OKLAHOMA WATERSHED 522 NEAR MINNEKAH

LOCATION: Little Washita River Watershed above U.S. highway 81 bridge South of Chickasha in Grady and Caddo Counties, Okla.; tributary to Washita River; Fed River Basin. GAGING STATION--SE1/4 sec. 32, T. 6 N., R. 7 W., lat. 34 deg. 57 min., long. 97 deg. 57 min., 5-1/2 miles South of Chickasha, Okla., at U.S. highway 81 bridge.

AREA: 132990.00 acres 207.89 sq. miles

MONTHLY PRECIPITATION AND RUNOFF (inches)						CHICKASHA, OKLAHOMA WATERSHED 522 NEAR MINNEKAH											
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual			
1970	P	0.10	0.64	3.04	2.86	1.57	1.94	1.08	0.79	5.93	1.64	0.74	0.26	20.59			
	Q	0.054	0.057	0.116	0.149	0.082	0.036	0.002	0.0	0.112	0.025	0.026	0.038	0.697			
STA AV	P	0.86	1.17	1.68	2.74	3.88	2.73	1.82	2.39	4.16	1.80	2.06	0.84	26.14			
	Q	0.070	0.077	0.103	0.152	0.268	0.130	0.032	0.043	0.069	0.039	0.092	0.056	1.130			
ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																	
		Maximum Discharge				Maximum Volume for Selected Time Interval											
		Date	Rate	1 Hour Date	Vol.	2 Hours Date	Vol.	6 Hours Date	Vol.	12 Hours Date	Vol.	1 Day Date	Vol.	2 Days Date	Vol.	8 Days Date	Vol.
1970		4-30	0.011	4-30	0.010	4-30	0.019	4-30	0.038	9-22	0.063	9-22	0.093	9-22	0.100	9-22	0.108
MAXIMUMS FOR PERIOD OF RECORD																	
		5-10 1964	0.056	5-10 1964	0.055	5-10 1964	0.108	5- 9 1964	0.253	5- 9 1964	0.316	5- 9 1964	0.365	5- 9 1964	0.476	5- 3 1969	0.536

NOTES: Watershed conditions: From a 1967 survey; sowed crop - 12%; row crop - 3%; alfalfa - 3%; pasture and range - 66%; and miscellaneous - 16%. For maps of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1963, USDA Misc. Pub. 1164, p. 69.15-4 (Topography) and 1965, USDA Misc. Pub. 1216, p. 69.7-21 (Composite). Precipitation data obtained from a Thiessen weighted average of 36 gages on the watershed. Precipitation records began Oct. 1961; runoff records began April 1963. For long-time precipitation records, see National Weather Service records at Chickasha, Okla.

1970	DAILY PRECIPITATION (inches)					CHICKASHA, OKLAHOMA			WATFRESHED 522 NEAR MINNEKAH				
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
1	0.0	0.0	0.0	0.20	0.0	0.01	0.0	0.0	0.02	0.0	0.10	0.0	
2	0.0	0.0	0.0	0.0	0.0	0.02	0.0	0.0	0.03	0.0	0.0	0.0	
3	0.0	0.0	0.0	0.0	0.0	0.39	0.0	0.01	0.0	0.0	0.0	0.0	
4	0.0	0.0	0.0	0.24	0.0	0.16	0.0	0.0	0.0	0.0	0.0	0.0	
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.51	0.0	0.0	
6	0.0	0.0	1.39	0.0	0.0	0.0	0.06	0.0	0.0	0.0	0.0	0.0	
7	0.0	0.0	0.15	0.0	0.0	0.0	0.0	0.0	0.11	0.02	0.0	0.0	
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.02	0.36	0.0	0.0	
9	0.0	0.0	0.0	0.02	0.0	0.0	0.09	0.01	0.0	0.0	0.0	0.0	
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.01	0.0	0.0	0.0	
11	0.0	0.0	0.0	0.0	0.0	0.05	0.23	0.0	0.0	0.0	0.0	0.0	
12	0.0	0.0	0.03	0.0	0.0	0.0	0.25	0.0	0.0	0.0	0.0	0.0	
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.74	0.0	0.63	0.0	
14	0.0	0.0	0.0	0.0	0.97	0.0	0.0	0.0	0.07	0.0	0.01	0.0	
15	0.0	0.0	0.0	0.0	0.12	0.0	0.0	0.0	0.0	0.07	0.0	0.17	
16	0.0	0.0	0.64	0.36	0.0	0.0	0.0	0.0	0.62	0.08	0.0	0.0	
17	0.10	0.0	0.0	0.01	0.0	0.0	0.0	0.0	0.37	0.22	0.0	0.0	
18	0.0	0.0	0.01	0.05	0.0	0.0	0.0	0.05	0.0	0.0	0.0	0.0	
19	0.0	0.0	0.13	0.0	0.0	0.0	0.0	0.29	0.0	0.0	0.0	0.0	
20	0.0	0.0	0.0	0.0	0.0	1.30	0.28	0.13	0.0	0.0	0.0	0.02	
21	0.0	0.0	0.07	0.0	0.0	0.01	0.0	0.39	0.04	0.0	0.0	0.06	
22	0.0	0.09	0.0	0.01	0.0	0.0	0.0	0.01	3.86	0.35	0.0	0.0	
23	0.0	0.07	0.0	0.03	0.07	0.0	0.0	0.0	0.02	0.03	0.0	0.0	
24	0.0	0.16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
25	0.0	0.0	0.0	0.01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
26	0.0	0.0	0.0	0.29	0.0	0.0	0.0	0.0	0.02	0.0	0.0	0.0	
27	0.0	0.20	0.0	0.0	0.14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
28	0.0	0.12	0.61	0.0	0.01	0.0	0.17	0.0	0.0	0.0	0.0	0.0	
29	0.0	0.0	0.0	0.97	0.20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
30	0.0	0.01	0.67	0.0	0.0	0.0	0.0	0.10	0.0	0.0	0.0	0.01	
31	0.0	0.0	0.0	0.06	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
TOTAL	0.10	0.64	3.04	2.86	1.57	1.94	1.08	0.79	5.93	1.64	0.74	0.26	
STA AV	0.86	1.17	1.68	2.74	3.88	2.73	1.82	2.39	4.16	1.80	2.06	0.84	

NOTES: For daily air temperatures in the vicinity, see table for Watershed W-700, (69.007) of this publication. Precipitation values are a Thiessen weighted average of 36 rain gages on the watershed. STA AV based on 10 yr (1961-70) record period.

1970 MEAN DAILY DISCHARGE (cfs) CHICKASHA, OKLAHOMA WATERSHED 522 NEAR MINNEBAH												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	8.20	10.80	18.00	18.70	41.44	7.80	0.40	0.0	0.0	2.80	4.90	6.00
2	8.20	10.80	15.40	20.80	23.00	9.20	0.40	0.0	0.0	2.80	4.60	6.80
3	7.80	9.70	14.20	16.00	21.50	9.70	0.20	0.0	0.0	2.50	4.60	6.80
4	7.30	10.80	13.60	16.70	18.00	16.70	0.20	0.0	0.0	2.00	4.60	6.80
5	6.90	11.30	13.00	20.10	16.70	12.40	0.20	0.0	0.0	2.30	4.30	7.60
6	6.40	11.30	31.63	15.40	15.40	9.20	0.70	0.0	0.0	7.98	4.90	6.40
7	6.00	11.30	39.37	14.80	14.20	6.90	1.10	0.0	0.0	2.80	4.90	6.00
8	4.10	11.30	23.70	13.60	12.40	5.20	0.10	0.0	0.0	2.50	5.30	5.60
9	3.80	10.20	20.10	14.20	11.30	4.50	0.20	0.0	0.0	8.37	5.30	5.60
10	4.10	11.30	19.40	15.40	11.30	4.10	0.0 T	0.0	0.0	3.90	4.90	6.00
11	8.70	11.30	18.70	15.40	9.70	4.10	1.72	0.0	0.0	2.80	4.60	6.40
12	14.80	11.30	18.70	14.80	9.20	5.20	3.35	0.0	0.0	3.10	4.60	6.40
13	19.40	11.30	20.10	12.40	9.20	4.50	0.40	0.0	0.0	3.30	5.60	6.00
14	18.00	11.90	17.30	11.90	10.50	3.80	0.0 T	0.0	0.0	3.60	8.40	6.40
15	16.00	11.90	16.00	12.40	73.60	2.80	0.0	0.0	0.0	3.60	6.80	6.40
16	13.00	11.90	20.80	13.60	25.30	3.40	0.0	0.0	0.0	3.30	4.90	7.20
17	11.30	11.30	38.09	60.57	16.70	3.10	0.0	0.0	5.82	4.30	4.60	7.20
18	7.80	11.30	23.01	24.50	9.70	2.50	0.0	0.0	3.80	5.60	4.60	6.80
19	4.10	9.70	20.10	18.70	7.30	1.70	0.0	0.0	0.40	4.60	3.90	6.40
20	3.10	8.70	20.10	14.20	7.30	2.46	0.0	0.0	0.0 T	4.60	3.30	7.20
21	3.10	8.70	19.40	11.90	7.80	52.82	0.0	0.0	0.0	4.30	3.60	12.70
22	5.20	9.70	20.80	11.30	6.90	10.37	2.80	0.0	255.64	5.52	4.30	8.90
23	7.30	10.80	18.00	11.90	7.30	4.10	1.70	0.0	292.94	10.70	3.60	6.80
24	9.70	13.60	18.70	13.00	8.70	3.10	0.10	0.0	21.16	7.60	3.60	6.00
25	12.40	15.40	18.70	11.90	7.30	2.50	0.0 T	0.0	16.70	6.00	4.60	5.60
26	14.80	12.40	18.00	13.60	6.90	1.70	0.0	0.0	9.70	4.90	4.60	5.60
27	16.00	11.30	16.00	20.10	8.70	1.50	0.0	0.0	6.00	4.60	4.60	6.80
28	15.40	16.70	24.50	13.60	11.30	2.50	0.0	0.0	4.80	5.30	4.60	7.20
29	14.20		31.80	13.60	10.80	1.30	0.0	0.0	4.10	4.90	4.60	7.60
30	12.40		20.80	349.52	9.70	0.90	0.0	0.0	3.40	5.60	5.60	7.60
31	11.30		18.00		9.20		0.0	0.0		5.30		7.60
MEAN	9.703	11.357	20.839	27.820	14.785	6.668	0.438	0.0	20.816	4.564	4.777	6.852
INCHES	0.054	0.057	0.116	0.149	0.082	0.036	0.002	0.0	0.112	0.025	0.026	0.038
STA AV	0.070	0.077	0.103	0.152	0.268	0.130	0.032	0.043	0.069	0.039	0.092	0.056

NOTES: To convert mean daily discharge in CFS to IN/DAY, multiply by 0.0001790. To convert discharge in inches to AC-FT, multiply by 11,083. Yearly mean discharge, 10.7 CFS. STA AV based on 8 yr (1963-70) record period.

CHICKASHA, OKLAHOMA WATERSHED 512 AT TABLER

LOCATION: East Bitter Creek Watershed above U.S. Highway 62 bridge at Tabler, in Grady County, Okla.; tributary to Washita River; Red River Basin. GAGING STATION--SW1/4 sec. 27, T. 7 N., R. 6 W., lat. 35 deg. 05 min., long. 97 deg. 50 min., at Tabler, Okla., at U.S. highway 62 bridge.

AREA: 22530.00 acres 35.20 sq. miles

MONTHLY PRECIPITATION AND RUNOFF (inches)							CHICKASHA, OKLAHOMA WATERSHED 512 AT TABLER												
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual					
1970	P	0.09	0.65	2.13	2.47	3.72	1.29	1.46	2.19	7.42	2.90	1.04	0.32	25.68					
	Q	0.077	0.072	0.094	0.121	0.309	0.053	0.002	0.018	0.591	0.124	0.046	0.059	1.558					
STA AV	P	0.85	1.23	1.74	2.87	3.55	3.14	2.23	3.41	4.20	1.72	2.14	0.95	28.03					
	Q	0.091	0.099	0.149	0.307	0.343	0.182	0.082	0.192	0.199	0.067	0.155	0.079	1.944					
ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																			
		Maximum Discharge		1 Hour		2 Hours		Maximum Volume for Selected Time Interval		6 Hours		12 Hours		1 Day		2 Days		8 Days	
		Date	Rate	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.
1970		9-22	0.054	9-22	0.052	9-22	0.103	9-22	0.279	9-22	0.455	9-22	0.556	9-22	0.576	9-22	0.576	9-22	0.585
MAXIMUMS FOR PERIOD OF RECORD																			
		8-8 1965	0.134	8-8 1965	0.129	8-8 1965	0.244	8-7 1965	0.472	8-7 1965	0.523	9-22 1970	0.556	4-12 1967	0.610	4-9 1967	0.742		

NOTES: Watershed conditions: From a 1967 survey; sowed crop - 5%; row crop - 1%; alfalfa - 4%; pasture and range - 84%; and miscellaneous - 6%. For maps of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1965, USDA Misc. Pub. 1216, p. 69.16-8 (Topography) and p. 69.7-21 (Composite). Precipitation records began Oct. 1961; runoff records began Aug. 1963. STA AV (P) values are a Thiessen weighted average of 10 gages for 1961-66 and 31 gages for 1967-70 on the watershed. For long-time precipitation records, see National Weather Service records at Chickasha, Okla.

1970 DAILY PRECIPITATION (inches)													CHICKASHA, OKLAHOMA WATERSHED 512 AT TABLER	
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
1	0.0	0.0	0.0	0.12	0.0	0.16	0.0	0.0	0.02	0.04	0.17	0.0		
2	0.0	0.0	0.01	0.0	0.0	0.05	0.0	0.0	0.05	0.0	0.0	0.0		
3	0.0	0.0	0.0	0.0	0.0	0.60	0.0	0.0	0.0	0.0	0.0	0.0		
4	0.0	0.0	0.0	0.26	0.0	0.26	0.0	0.0	0.0	0.0	0.0	0.0		
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.17	0.0	0.0		
6	0.0	0.0	0.62	0.0	0.0	0.0	0.03	0.0	0.0	0.0	0.0	0.0		
7	0.0	0.0	0.17	0.0	0.0	0.0	0.0	0.0	0.04	0.40	0.0	0.0		
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.56	0.0	0.0		
9	0.0	0.0	0.0	0.0	0.0	0.0	0.16	0.0	0.0	0.0	0.0	0.0		
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
11	0.0	0.0	0.0	0.0	0.0	0.07	0.04	0.0	0.06	0.0	0.0	0.0		
12	0.0	0.0	0.01	0.0	0.0	0.0	0.66	0.0	0.0	0.0	0.0	0.0		
13	0.0	0.0	0.0	0.0	0.01	0.0	0.0	0.0	0.53	0.0	0.87	0.0		
14	0.0	0.0	0.0	0.0	1.59	0.0	0.0	0.0	0.63	0.0	0.0	0.0		
15	0.0	0.0	0.0	0.0	0.11	0.0	0.0	0.0	0.0	0.0	0.0	0.24		
16	0.0	0.0	0.49	0.37	0.0	0.0	0.0	0.0	0.34	0.04	0.0	0.0		
17	0.09	0.0	0.0	0.01	0.0	0.0	0.0	0.0	0.40	0.15	0.0	0.0		
18	0.0	0.0	0.02	0.23	0.0	0.0	0.0	1.00	0.0	0.0	0.0	0.0		
19	0.0	0.0	0.14	0.0	0.0	0.0	0.0	1.01	0.0	0.0	0.0	0.0		
20	0.0	0.0	0.0	0.0	0.0	0.15	0.29	0.0	0.0	0.0	0.0	0.0		
21	0.0	0.0	0.06	0.0	0.0	0.0	0.0	0.02	0.0	0.0	0.0	0.08		
22	0.0	0.24	0.0	0.0	0.0	0.0	0.0	0.16	5.22	0.52	0.0	0.0		
23	0.0	0.07	0.0	0.0	0.0	0.0	0.0	0.0	0.07	0.02	0.0	0.0		
24	0.0	0.06	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.01	0.0	0.0	0.0		
26	0.0	0.0	0.0	0.06	0.0	0.0	0.0	0.0	0.05	0.0	0.0	0.0		
27	0.0	0.12	0.0	0.0	0.17	0.0	0.02	0.0	0.0	0.0	0.0	0.0		
28	0.0	0.14	0.59	0.0	0.0	0.0	0.26	0.0	0.0	0.0	0.0	0.0		
29	0.0	0.0	0.0	0.34	1.61	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
30	0.0	0.02	1.08	0.06	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
31	0.0	0.0	0.0	0.17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
TOTAL	0.09	0.65	2.13	2.47	3.72	1.29	1.46	2.19	7.42	2.90	1.04	0.32		
STA AV	0.85	1.23	1.74	2.87	3.55	3.14	2.23	3.41	4.20	1.72	2.14	0.95		

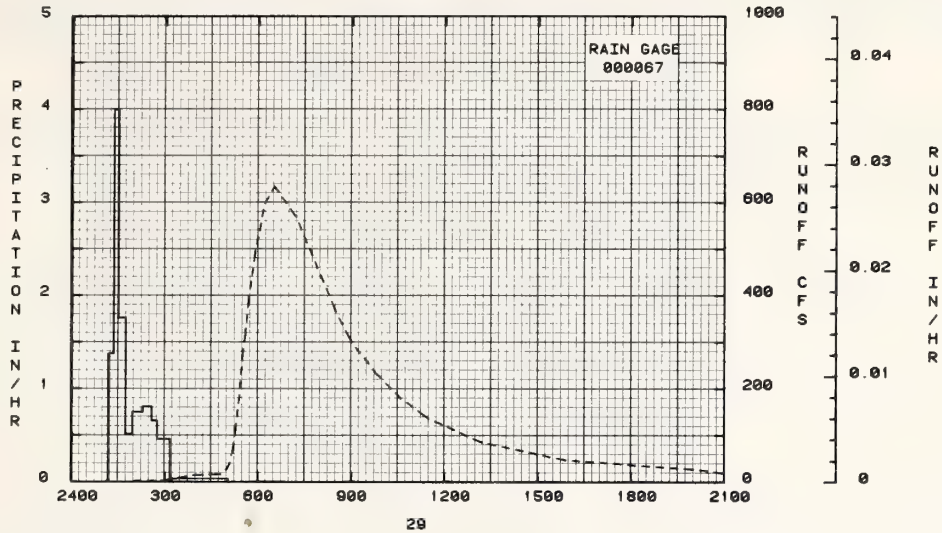
NOTES: For daily air temperatures in the vicinity, see table for Watershed W-700, (69.007) of this publication. STA AV values are a Thiessen weighted average of 10 gages for 1961-66 and 31 gages for 1967-70 on the watershed. STA AV based on 10 yr for total period of record (1961-70).

1970 MEAN DAILY DISCHARGE (cfs) CHICKASHA, OKLAHOMA WATERSHED 512 AT TABLE												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	2.00	2.40	3.10	3.00	7.19	5.54	0.0	0.0	0.0	0.70	1.00	1.80
2	2.00	2.50	2.80	2.90	3.80	3.80	0.0	0.0	0.0	0.70	1.30	1.80
3	2.00	2.50	2.80	2.50	2.60	4.14	0.0	0.0	0.0	0.60	1.30	1.80
4	2.00	2.30	2.60	2.70	2.40	7.50	0.0	0.0	0.0	0.50	1.20	1.80
5	1.80	2.30	2.50	3.00	2.30	4.70	0.0	0.0	0.0	32.35	1.20	1.80
6	1.80	2.40	3.50	2.80	2.20	3.30	0.0	0.0	0.0	8.10	1.20	1.60
7	1.80	2.40	4.30	2.60	2.00	2.60	0.0	0.0	0.0	7.09	1.20	1.60
8	1.80	2.50	3.60	2.40	1.90	2.20	0.0	0.0	0.0	26.11	1.20	1.80
9	1.80	2.50	3.00	2.40	1.90	1.80	0.0	0.0	0.0	5.61	1.20	1.90
10	2.00	2.40	2.60	2.30	1.80	1.60	0.0	0.0	0.0	2.10	1.20	2.10
11	2.20	2.30	2.50	2.30	1.70	1.70	0.0	0.0	0.0	1.60	1.40	1.90
12	2.50	2.30	2.50	2.20	1.50	2.00	1.21	0.0	0.0	1.20	1.20	1.80
13	3.00	2.50	2.50	2.10	1.50	1.60	0.20	0.0	0.0	1.20	2.29	1.80
14	3.00	2.50	2.50	2.10	1.95	1.30	0.10	0.0	2.19	1.20	3.87	1.60
15	3.00	2.50	2.40	2.30	83.25	1.10	0.0 T	0.0	0.10	1.20	2.10	1.80
16	3.40	2.30	2.60	2.70	6.40	0.90	0.0	0.0	0.0 T	1.10	1.80	2.00
17	3.40	2.20	3.90	3.60	3.40	0.70	0.0	0.0	0.10	1.30	1.60	1.80
18	2.20	2.20	3.40	4.30	2.40	0.50	0.0	0.0	0.10	1.40	1.40	1.60
19	2.00	2.10	3.10	4.30	1.90	0.40	0.0	16.38	0.0 T	1.30	1.40	1.70
20	1.80	2.00	2.60	2.90	1.60	0.40	0.0	0.89	0.0	1.20	1.30	1.60
21	1.80	2.00	3.60	2.40	1.50	0.60	0.0	0.20	0.0	1.20	1.30	1.80
22	1.80	2.30	3.00	2.20	1.30	0.40	0.0	0.0 T	392.09	3.03	1.20	2.00
23	2.20	2.70	2.60	2.30	1.30	0.30	0.0	0.0	149.18	6.85	1.00	1.90
24	3.00	2.70	2.30	2.30	1.30	0.30	0.0	0.0	7.31	1.90	1.10	1.60
25	3.00	3.00	2.10	2.30	1.30	0.30	0.0	0.0	2.70	1.50	1.20	1.70
26	3.00	3.00	2.00	2.40	1.20	0.30	0.0	0.0	1.60	1.20	1.30	1.60
27	2.60	2.70	2.10	2.40	1.30	0.20	0.0	0.0	1.30	1.00	1.40	1.70
28	2.60	3.10	3.40	2.30	2.00	0.10	0.0	0.0	1.00	1.00	1.40	1.80
29	2.60		3.50	2.60	121.15	0.0 T	0.0	0.0	0.90	1.10	1.60	1.90
30	2.50		2.90	38.07	13.33	0.0	0.0	0.0	0.80	1.00	1.80	2.00
31	2.40		2.90		5.00		0.0	0.0		1.00		1.90
MEAN	2.355	2.443	2.877	3.822	9.173	1.676	0.049	0.563	18.646	3.785	1.455	1.790
INCHES	0.077	0.072	0.094	0.121	0.300	0.053	0.002	0.018	0.591	0.124	0.046	0.059
STA AV	0.091	0.099	0.149	0.307	0.343	0.182	0.082	0.192	0.199	0.067	0.155	0.079

NOTES: To convert mean daily discharge in CFS to IN/DAY, multiply by 0.001056. To convert discharge in inches to AC-FT, multiply by 1,878. STA AV based on 8 yr (1963-70) record period.

1970 SELECTED RUNOFF EVENT CHICKASHA, OKLAHOMA WATERSHED 512 AT TABLE												
ANTECEDENT CONDITIONS			RAINFALL				RUNOFF					
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.		
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)		
EVENT OF MAY 29, 1970												
5-29	RG 000067		5-29	RG 000067			5-29					
	0.0	0.000		110	0.0	0.0		200	1.800	0.0		
				120	1.3800	0.23		300	2.700	0.0001		
				129	4.0000	0.83		342	11.600	0.0003		
				144	1.7600	1.27		400	15.000	0.0005		
				157	0.5077	1.38		448	16.000	0.0010		
WATERSHED CONDITIONS:												
From a 1967 survey; sowed												
crop - 5%; row crop - 1%;												
alfalfa - 4%; pasture and												
range - 84%; and miscel-												
laneous - 6%.												
				217	0.7500	1.63		500	27.400	0.0012		
				234	0.8118	1.86		506	41.300	0.0014		
				245	0.6545	1.98		512	68.100	0.0016		
				310	0.4560	2.17		518	124.600	0.0020		
				503	0.0319	2.23		524	185.700	0.0027		
								530	270.398	0.0037		
								536	329.000	0.0050		
								542	399.800	0.0066		
								554	496.000	0.0105		
								612	599.398	0.0177		
								630	634.398	0.0258		
								712	568.599	0.0443		
								800	442.398	0.0621		
								830	364.398	0.0710		
								900	299.800	0.0783		
								948	232.400	0.0877		
								1036	178.300	0.0949		
								1130	135.400	0.1011		
								1312	84.300	0.1093		
								1554	46.100	0.1170		

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.00004402.



EVENT OF MAY 29, 1970
CHICKASHA, OKLAHOMA WATERSHED 512 AT TABLER

1970 SELECTED RUNOFF EVENT

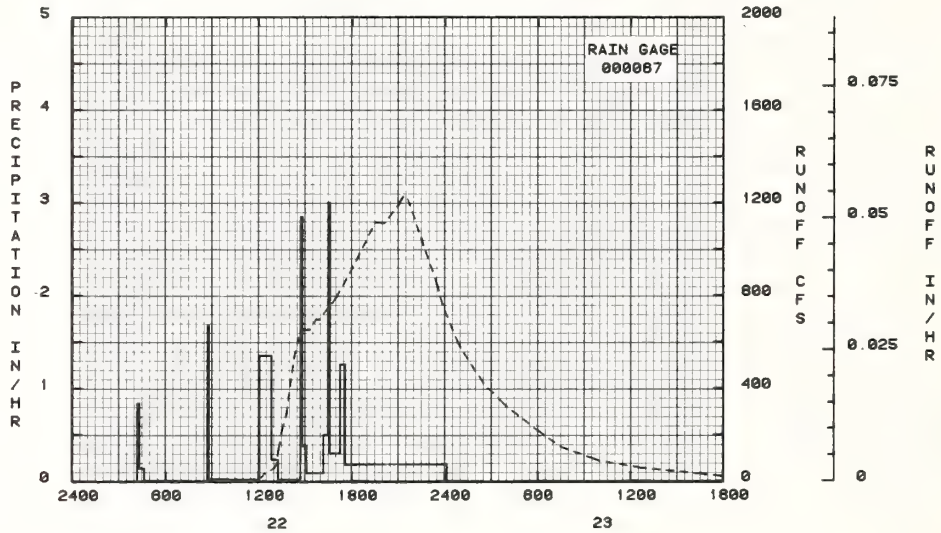
CHICKASHA, OKLAHOMA WATERSHED 512 AT TABLER

ANTECEDENT CONDITIONS			RAINFALL			RUNOFF		
Date	Rainfall	Runoff	Date	Time	Intensity	Date	Time	Rate
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	Mo-Day	of Day	(cfs)
EVENT OF SEPTEMBER 22 - 23, 1970								
9-22	RG 000067	0.0	9-22	410	0.0	9-22	1012	0.100
		0.0		420	0.8400		1030	1.400
				438	0.1333		1048	4.000
				714	0.0038		1106	4.400
				842	0.0		1130	4.400
				847	1.6800		1200	3.800
				1204	0.0213		1212	16.000
				1250	1.3565		1224	33.700
				1316	0.2308		1300	56.800
				1442	0.0140		1312	79.800
				1450	2.8500		1318	137.900
				1506	0.3750		1330	217.200
				1611	0.0831		1348	289.800
				1629	0.5000		1400	380.698
				1635	2.9998		1418	533.000
				1716	0.2927		1442	654.100
				1736	1.2600		1518	654.100
			9-23	5	0.1771		1542	697.898
							1554	697.898
							1700	791.198
							1818	953.300
							1930	1116.198
							2006	1111.898
							2100	1190.100
							2118	1225.800
							2136	1216.800
							2230	1045.100
							2330	848.398
							2400	732.698
						9-23	100	577.698
							230	422.000
							400	320.500
							600	217.200
							730	146.700
							1000	86.100

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.00004402.

1970 SELECTED RUNOFF EVENT			CHICKASHA, OKLAHOMA WATERSHED 512 AT TABLE								
ANTECEDENT CONDITIONS			RAINFALL			RUNOFF					
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.	
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)	
EVENT OF SEPTEMBER 22 - 23, 1970 (CONTINUED)											
									1300	53.300	0.5583

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.00004402.



EVENT OF SEPTEMBER 22 - 23, 1970
CHICKASHA, OKLAHOMA WATERSHED 512 AT TABLE

CHICKASHA, OKLAHOMA WATERSHED 621 NEAR TABLER

LOCATION: Winter Creek Watershed above county farm to market road bridge North of Alex in Grady County, Okla., tributary to Washita River; Red River Basin. GAGING STATION--NE1/4 sec. 18, T. 6 N., E. 5 W., lat. 35 deg. 00 min., long. 97 deg. 46 min., 5 miles North and 1 mile East of Alex, Okla., about 1,000 feet downstream from County section line farm to market road bridge over Winter Creek.

AREA: 21310.00 acres 33.30 sq. miles

MONTHLY PRECIPITATION AND RUNOFF (inches)														CHICKASHA, OKLAHOMA WATERSHED 621 NEAR TABLER															
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual															
1970	P	0.12	0.77	1.95	1.87	3.11	1.59	1.15	1.85	9.40	4.21	1.09	0.39	27.50															
	Q	0.100	0.105	0.157	0.129	0.125	0.090	0.012	0.003	1.336	0.682	0.146	0.120	3.005															
STA AV	P	1.10	1.24	1.60	2.80	4.03	2.91	2.18	2.96	4.59	1.82	2.09	0.96	28.27															
	Q	0.130	0.142	0.168	0.252	0.495	0.189	0.129	0.127	0.349	0.153	0.190	0.111	2.436															
ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																													
		Maximum Discharge		1 Hour		2 Hours		Maximum Volume for Selected Time		Interval		2 Days		8 Days															
		Date	Rate	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.												
1970		9-22	0.112	9-22	0.096	9-22	0.166	9-22	0.410	9-22	0.649	9-22	0.791	9-22	0.957	9-22	1.310												
MAXIMUMS FOR PERIOD OF RECORD																													
		5-10	0.207	5-10	0.179	5-10	0.269	9-22	0.410	9-22	0.649	9-22	0.791	9-22	0.957	9-22	1.310												
		1964		1964		1964		1970		1970		1970		1970		1970													

NOTES: Watershed conditions: From a 1967 survey; sowed crop - 5%; row crop - 1%; alfalfa - 2%; pasture and range - 82%; and miscellaneous - 10%. For maps of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1965, USDA Misc. Pub. 1216, p. 69.17-8 (Topography) and p. 69.7-21 (Composite). Precipitation data obtained from a Thiessen weighted average of 9 gages on the watershed. Precipitation records began Oct. 1961; runoff records began Oct. 1963. For long-time precipitation records, see National Weather Service records at Chickasha, Okla.

1970 DAILY PRECIPITATION (inches)														CHICKASHA, OKLAHOMA WATERSHED 621 NEAR TABLER									
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec											
1	0.0	0.0	0.0	0.16	0.0	0.23	0.0	0.0	0.06	0.03	0.17	0.0											
2	0.0	0.0	0.0	0.0	0.0	0.03	0.0	0.0	0.03	0.0	0.0	0.0											
3	0.0	0.0	0.0	0.0	0.0	0.33	0.0	0.0	0.0	0.0	0.0	0.0											
4	0.0	0.0	0.0	0.28	0.0	0.29	0.0	0.0	0.0	0.0	0.0	0.0											
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.20	0.0	0.0											
6	0.0	0.0	0.56	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
7	0.0	0.0	0.19	0.0	0.0	0.0	0.0	0.0	0.18	0.64	0.0	0.0											
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.01	0.99	0.0	0.0											
9	0.0	0.0	0.0	0.0	0.0	0.0	0.14	0.0	0.0	0.0	0.0	0.0											
10	0.0	0.0	0.0	0.0	0.0	0.0	0.03	0.0	0.01	0.0	0.0	0.0											
11	0.0	0.0	0.0	0.0	0.0	0.35	0.10	0.0	0.02	0.0	0.0	0.0											
12	0.0	0.0	0.0	0.0	0.0	0.0	0.46	0.0	0.0	0.0	0.0	0.0											
13	0.0	0.0	0.0	0.0	0.02	0.0	0.0	0.0	0.75	0.0	0.92	0.0											
14	0.0	0.0	0.0	0.0	0.90	0.0	0.0	0.0	0.32	0.0	0.0	0.0											
15	0.0	0.0	0.0	0.0	0.11	0.0	0.0	0.0	0.0	0.0	0.0	0.28											
16	0.0	0.0	0.48	0.27	0.0	0.0	0.0	0.0	0.33	0.02	0.0	0.0											
17	0.11	0.0	0.0	0.02	0.0	0.0	0.0	0.0	0.63	0.19	0.0	0.0											
18	0.01	0.0	0.0	0.17	0.0	0.0	0.0	0.78	0.0	0.0	0.0	0.0											
19	0.0	0.0	0.15	0.0	0.0	0.0	0.0	0.96	0.0	0.0	0.0	0.0											
20	0.0	0.0	0.0	0.0	0.0	0.35	0.21	0.0	0.0	0.0	0.0	0.02											
21	0.0	0.0	0.03	0.0	0.0	0.01	0.0	0.05	0.0	0.0	0.0	0.09											
22	0.0	0.23	0.0	0.0	0.0	0.0	0.0	0.06	7.00	1.01	0.0	0.0											
23	0.0	0.08	0.0	0.02	0.0	0.0	0.0	0.0	0.06	0.05	0.0	0.0											
24	0.0	0.16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
26	0.0	0.0	0.0	0.02	0.0	0.0	0.0	0.0	0.0	0.08	0.0	0.0											
27	0.0	0.09	0.0	0.0	0.16	0.0	0.01	0.0	0.0	0.0	0.0	0.0											
28	0.0	0.21	0.54	0.0	0.0	0.0	0.20	0.0	0.0	0.0	0.0	0.0											
29	0.0	0.0	0.0	0.10	1.55	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
30	0.0	0.0	0.0	0.83	0.01	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
31	0.0	0.0	0.0	0.36	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
TOTAL	0.12	0.77	1.95	1.87	3.11	1.59	1.15	1.85	9.40	4.21	1.09	0.39											
STA AV	1.10	1.24	1.60	2.80	4.03	2.91	2.18	2.96	4.59	1.82	2.09	0.96											

NOTES: For daily air temperatures in the vicinity, see table for Watershed W-700, (69.007) of this publication. Precipitation values are a Thiessen weighted average of 9 rain gages on the watershed. STA AV based on 10 yr (1961-70) record period.

1970 MEAN DAILY DISCHARGE (cfs) CHICKASHA, OKLAHOMA WATERSHED 621 NEAR TABLER												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	1.90	3.10	5.40	4.90	4.30	23.56	0.0	0.0	0.0	14.40	5.80	3.80
2	1.90	3.80	4.70	4.70	3.10	9.00	0.0	0.0	0.0	12.10	5.40	3.80
3	1.90	3.20	4.70	4.10	2.60	6.50	0.0	0.0	0.0	10.00	5.10	3.60
4	1.90	3.60	4.30	4.70	2.50	7.60	0.0	0.0	0.0	7.60	4.70	3.20
5	1.90	3.20	4.10	4.70	2.00	5.60	0.0	0.0	0.0	27.21	4.50	3.20
6	1.90	3.20	7.10	3.80	1.60	3.90	0.0	0.0	0.0	20.30	4.50	3.10
7	1.90	3.20	6.30	3.40	1.30	2.80	0.0	0.0	0.0	20.86	4.70	2.90
8	1.60	3.20	5.60	3.40	1.50	2.00	0.0	0.0	0.0	143.73	4.70	3.10
9	1.60	3.20	4.50	3.40	1.40	1.40	1.60	0.0	0.0	47.40	4.10	3.20
10	1.60	3.10	4.30	3.60	1.20	1.10	2.90	0.0	0.0	37.50	3.90	3.40
11	1.90	3.10	3.90	3.60	1.10	1.70	2.10	0.0	0.0	29.40	3.90	3.80
12	2.20	3.10	3.80	4.70	0.80	2.00	2.60	0.0	0.0	19.30	3.60	2.80
13	4.70	3.10	3.40	3.90	0.80	1.20	1.20	0.0	0.0	16.50	7.28	2.90
14	4.70	3.10	3.40	3.60	1.47	1.10	0.80	0.0	0.44	12.80	7.90	2.90
15	4.70	3.10	3.40	3.60	9.16	0.90	0.20	0.0	0.16	11.09	5.40	4.10
16	4.70	3.10	5.40	3.60	2.60	0.70	0.0 T	0.0	0.38	8.40	4.70	4.50
17	3.40	2.80	5.10	4.90	2.00	0.40	0.0	0.0	1.40	8.40	4.50	3.80
18	1.60	2.80	4.30	5.40	1.40	0.30	0.0	0.0	1.20	7.10	4.30	3.40
19	1.60	2.60	5.10	4.70	1.30	0.10	0.0	2.66	0.50	7.10	4.30	3.60
20	1.60	2.20	4.50	3.60	1.10	1.87	0.0	0.49	0.20	6.50	4.50	3.40
21	1.60	2.10	4.50	2.90	1.00	3.02	0.0	0.0	0.10	6.30	3.90	3.80
22	1.60	3.10	4.50	2.60	0.90	0.80	0.0	0.0	517.49	18.93	3.80	3.80
23	3.20	3.90	4.50	2.60	0.90	0.70	0.0	0.0	267.67	35.30	2.80	3.80
24	5.80	4.70	4.10	2.80	0.90	0.60	0.0	0.0	119.77	20.80	2.80	3.40
25	4.90	4.70	3.90	2.60	0.90	0.60	0.0	0.0	85.00	14.40	2.60	3.20
26	4.50	4.10	3.20	2.80	0.90	0.40	0.0	0.0	68.51	12.40	2.80	3.20
27	4.30	3.90	3.10	2.60	1.10	0.30	0.0	0.0	52.51	9.00	2.90	3.40
28	4.10	5.80	5.80	2.50	1.20	0.10	0.0	0.0	37.51	7.60	3.10	3.40
29	3.90		4.90	2.90	33.42	0.0 T	0.0	0.0	25.20	6.50	3.60	3.40
30	3.40		4.50	8.92	15.70	0.0	0.0	0.0	17.90	6.10	3.90	3.60
31	3.40		4.50		11.70		0.0	0.0		5.60		3.60
MEAN	2.900	3.361	4.542	3.851	3.608	2.675	0.339	0.099	39.865	19.695	4.353	3.455
INCHES	0.100	0.105	0.157	0.129	0.125	0.090	0.012	0.003	1.336	0.682	0.146	0.120
STA AV	0.130	0.142	0.168	0.252	0.495	0.189	0.129	0.127	0.349	0.153	0.190	0.111

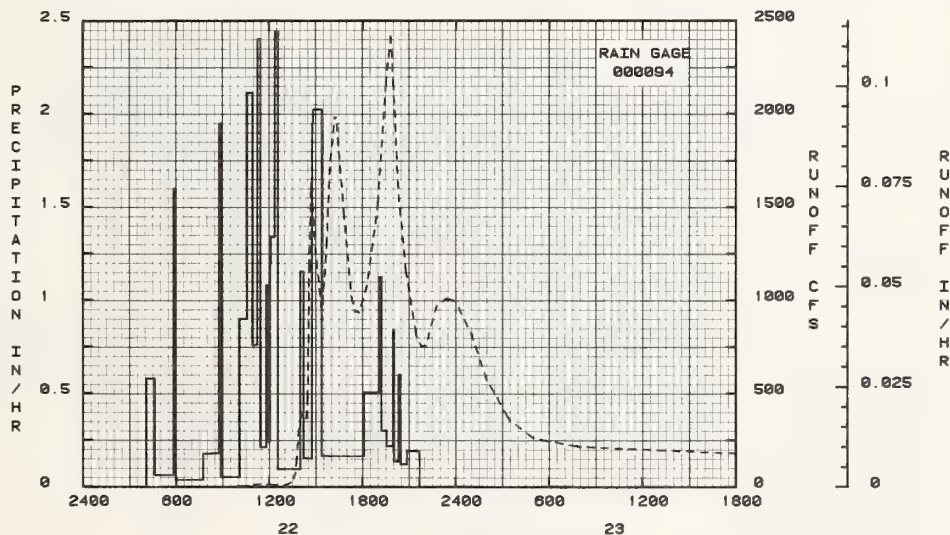
NOTES: To convert mean daily discharge in CFS to IN/DAY, multiply by 0.001117. To convert discharge in inches to AC-FT, multiply by 1,776. STA AV based on 8 yr (1963-70) record period.

1970 SELECTED RUNOFF EVENT			CHICKASHA, OKLAHOMA			WATERSHED 621 NEAR TABLER				
ANTECEDENT CONDITIONS			RAINFALL			RUNOFF				
Date	Rainfall	Eunoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)
EVENT OF SEPTEMBER 22 - 23, 1970										
RG 000094			RG 000094							
9-22	0.0	0.000	9-22	405	0.0	0.0	9-22	954	1.900	0.0
				438	0.5818	0.32		1042	2.200	0.0001
				550	0.0583	0.39		1100	9.000	0.0002
				559	1.6000	0.63		1124	11.400	0.0004
				744	0.0343	0.69		1206	7.100	0.0007
WATERSHED CONDITIONS:				818	0.1765	0.79		1300	4.300	0.0009
From a 1967 survey; sowed				845	0.1778	0.87		1324	21.400	0.0011
crop - 5%; row crop - 1%;				853	1.9500	1.13		1336	39.300	0.0014
alfalfa - 2%; pasture and				1007	0.0486	1.19		1342	72.900	0.0017
range - 82%; and miscel-				1035	0.9000	1.61		1348	161.300	0.0022
laneous - 10%.										
				1056	2.1143	2.35		1354	274.398	0.0032
				1115	0.7579	2.59		1400	362.300	0.0047
				1126	2.4000	3.03		1412	400.600	0.0082
				1149	0.2087	3.11		1424	366.000	0.0118
				1154	1.0800	3.20		1430	513.600	0.0139
				1204	0.2400	3.24		1436	1177.100	0.0177
				1208	1.2000	3.32		1442	1625.997	0.0243
				1221	1.3385	3.61		1500	1246.398	0.0444
				1235	2.4429	4.18		1524	941.198	0.0647
				1400	0.0918	4.31		1542	1300.198	0.0804
				1413	1.1538	4.56		1554	1712.897	0.0944
				1445	0.1500	4.64		1612	1980.897	0.1203
				1449	1.9500	4.77		1618	1980.897	0.1293
				1524	2.0229	5.95		1648	1471.598	0.1695
				1808	0.1610	6.39		1718	1015.698	0.1984
				1905	0.5053	6.87		1730	941.198	0.2076
				1913	1.1250	7.02		1748	934.000	0.2206
				1933	0.3000	7.12		1818	1078.300	0.2440
				1958	0.2160	7.21		1900	1521.799	0.2865
				2003	0.8400	7.28		1930	2157.697	0.3293
				2021	0.1333	7.32		1948	2415.198	0.3609
				2027	0.6000	7.38		2000	2131.798	0.3824
				2052	0.1200	7.43		2018	1604.600	0.4082
				2142	0.1920	7.59		2048	1160.198	0.4404
								2130	803.898	0.4725

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.00004654.

1970 SELECTED RUNOFF EVENT			CHICKASHA, OKLAHOMA WATERSHED 621 NEAR TABLER					
ANTECEDENT CONDITIONS			RAINFALL			RUNOFF		
Date Mo-Day	Rainfall (inches)	Runoff (inches)	Date Mo-Day	Time of Day	Intensity (in/hr)	Acc. (inches)	Date Mo-Day	Time of Day
								Rate (cfs)
								Acc. (inches)
EVENT OF SEPTEMBER 22 - 23, 1970 (CONTINUED)								
				9-22			2148	753.198
							2206	753.198
							2248	970.600
							2324	1008.100
							2400	993.000
				9-23			100	823.500
							200	572.600
							330	353.898
							500	259.000
							600	241.800
							800	211.900
							1330	192.700

NOTES: To convert runoff in CPS to IN/HR, multiply by 0.00004654.



EVENT OF SEPTEMBER 22 - 23, 1970

CHICKASHA, OKLAHOMA WATERSHED 621 NEAR TABLER

CHICKASHA, OKLAHOMA WATERSHED 121 AT GRACEMONT

LOCATION: Sugar Creek Watershed above Gracemont in Caddo County, Okla.; tributary to Washita River; Red River Basin.
GAGING STATION--NW1/4 sec. 9, T. 8 N., R. 10 W., lat. 35 deg. 11 min., long. 98 deg. 16 min., West side of Gracemont, Okla., on downstream side of county road bridge.

AREA: 131780.00 acres 205.90 sq. miles

MONTHLY PRECIPITATION AND RUNOFF (inches)							CHICKASHA, OKLAHOMA WATERSHED 121 AT GRACEMONT										
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual			
1970	P	0.09	0.12	2.23	3.02	3.80	1.89	1.80	1.09	3.53	1.05	0.34	0.30	19.26			
	Q	0.055	0.039	0.086	0.151	0.214	0.115	0.033	0.001	0.012	0.011	0.006	0.030	0.724			
STA AV	P	3.53	0.86	1.43	2.64	3.73	3.69	1.82	2.66	5.27	1.47	1.62	0.98	26.69			
	Q	0.052	0.325	0.085	0.135	0.262	0.118	0.014	0.027	0.228	0.032	0.038	0.051	1.367			
ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																	
		Maximum Discharge		1 Hour		2 Hours		Maximum Volume for Selected Time Interval									
		Date	Rate	Date	Vol.	Date	Vol.	6 Hours		1 Day		2 Days		8 Days			
								Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.		
1970		5-29	0.023	5-29	0.020	5-29	0.038	5-29	0.098	5-29	0.133	5-29	0.149	5-29	0.158	5-28	0.234
MAXIMUMS FOR PERIOD OF RECORD																	
		9-21	0.064	9-21	0.062	9-21	0.122	9-21	0.318	9-21	0.497	9-21	0.653	9-21	0.815	9-21	1.238
		1965		1965		1965		1965		1965		1965		1965		1965	

NOTES: Watershed conditions: From a 1967 survey; sowed crop - 9%; row crop - 13%; alfalfa - 3%; pasture and range - 53%; and miscellaneous - 22%. For maps of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1963, USDA Misc. Pub. 1164, p. 69.18-4 (Topography) and 1965, USDA Misc. Pub. 1216, p. 69.7-21 (Composite). The stream gaging station was maintained from Oct. 1955 to Oct. 1963 by the U.S. Geological Survey. Precipitation data obtained from a Thiessen weighted average of 32 gages on the watershed. Precipitation records began Oct. 1961; runoff records began Oct. 1963. For long-time precipitation records, see National Weather Service records at Chickasha, Okla.

1970	DAILY PRECIPITATION (inches)												CHICKASHA, OKLAHOMA WATERSHED 121 AT GRACEMONT	
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
1	0.0	0.0	0.0	0.48	0.0	0.05	0.0	0.0	0.0	0.0	0.07	0.0		
2	0.0	0.01	0.0	0.0	0.0	0.01	0.0	0.0	0.0	0.0	0.0	0.0		
3	0.0	0.0	0.0	0.0	0.0	0.36	0.0	0.0	0.07	0.0	0.0	0.0		
4	0.0	0.0	0.0	0.19	0.0	0.09	0.03	0.0	0.0	0.0	0.0	0.0		
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.32	0.0	0.0		
6	0.0	0.0	0.82	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.03	0.39	0.0	0.0		
9	0.0	0.0	0.0	0.0	0.0	0.0	0.06	0.01	0.0	0.0	0.0	0.0		
10	0.0	0.0	0.0	0.0	0.0	0.0	0.04	0.0	0.0	0.0	0.0	0.0		
11	0.0	0.0	0.0	0.0	0.0	0.53	0.46	0.0	0.0	0.0	0.0	0.0		
12	0.0	0.0	0.01	0.0	0.0	0.0	0.02	0.0	0.0	0.0	0.0	0.0		
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.30	0.0	0.27	0.0		
14	0.0	0.0	0.0	0.0	0.46	0.0	0.0	0.0	0.11	0.0	0.0	0.0		
15	0.0	0.0	0.0	0.0	0.02	0.0	0.20	0.0	0.0	0.01	0.0	0.26		
16	0.0	0.0	0.46	0.82	0.0	0.0	0.0	0.0	0.11	0.12	0.0	0.0		
17	0.08	0.0	0.0	0.01	0.0	0.0	0.0	0.0	0.0	0.21	0.0	0.0		
18	0.01	0.0	0.06	0.01	0.0	0.0	0.0	0.39	0.0	0.0	0.0	0.0		
19	0.0	0.0	0.09	0.0	0.0	0.0	0.0	0.10	0.0	0.0	0.0	0.0		
20	0.0	0.0	0.0	0.0	0.0	0.51	0.38	0.05	0.0	0.0	0.0	0.03		
21	0.0	0.0	0.01	0.0	0.0	0.0	0.0	0.0	0.05	0.0	0.0	0.01		
22	0.0	0.09	0.0	0.0	0.0	0.0	0.0	0.27	2.84	0.0	0.0	0.0		
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.02	0.0	0.0	0.0	0.0		
24	0.0	0.01	0.0	0.0	0.0	0.24	0.0	0.0	0.0	0.0	0.0	0.0		
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
26	0.0	0.0	0.0	0.0	0.0	0.10	0.0	0.0	0.0	0.0	0.0	0.0		
27	0.0	0.0	0.0	0.0	0.03	0.0	0.29	0.0	0.0	0.0	0.0	0.0		
28	0.0	0.01	0.40	0.0	0.16	0.0	0.18	0.0	0.0	0.0	0.0	0.0		
29	0.0	0.0	0.0	0.37	2.16	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
30	0.0	0.25	1.14	0.0	0.0	0.0	0.0	0.27	0.0	0.0	0.0	0.0		
31	0.0	0.13	0.97	0.0	0.0	0.0	0.14	0.0	0.0	0.0	0.0	0.0		
TOTAL	0.09	0.12	2.23	3.02	3.80	1.89	1.80	1.09	3.53	1.05	0.34	0.30		
STA AV	0.53	0.86	1.43	2.64	3.73	3.69	1.82	2.66	5.27	1.47	1.62	0.98		

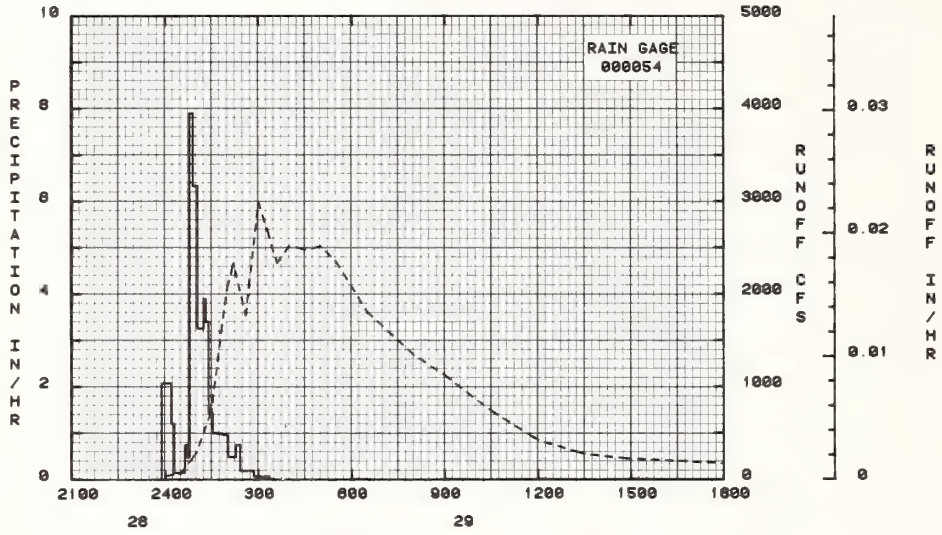
NOTES: For daily air temperatures in the vicinity, see table for Watershed W-700, (69-007) of this publication. Precipitation values are a Thiessen weighted average of 32 rain gages on the watershed. STA AV based on 10 yr. (1961-70) record period.

1970	MEAN DAILY DISCHARGE (cfs)					CHICKASHA, OKLAHOMA				WATERSHED 121 AT GRACEMONT			
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
1	10.50	6.60	7.50	48.89	51.41	272.44	1.50	0.20	0.10	0.10	0.30	1.20	
2	15.20	8.40	8.40	41.80	24.21	56.51	1.50	0.20	0.10	0.10	2.91	1.30	
3	9.40	7.50	7.50	24.21	22.50	31.90	1.20	0.20	0.10	0.10	0.80	1.50	
4	5.80	8.40	5.80	31.40	19.40	20.90	1.00	0.20	0.10	0.10	0.20	2.49	
5	5.80	9.40	16.60	33.40	18.00	14.50	0.80	0.20	0.0 T	2.31	0.41	7.10	
6	5.80	9.40	25.90	31.40	15.20	13.20	0.30	0.10	0.0	1.24	0.40	4.10	
7	4.40	10.50	24.20	29.50	12.70	10.70	0.30	0.10	0.0	0.20	0.20	4.10	
8	2.60	11.60	21.00	25.90	11.60	9.60	0.30	0.10	0.10	0.60	0.20	1.60	
9	2.60	10.50	19.40	22.50	9.40	8.00	0.90	0.10	0.10	0.50	0.10	2.20	
10	3.70	10.50	21.00	16.60	7.50	6.70	0.30	0.10	0.0 T	0.50	0.10	11.82	
11	4.40	8.40	12.70	18.00	6.60	72.60	0.40	0.20	0.10	0.40	3.78	23.60	
12	6.60	9.40	9.40	13.90	8.40	28.61	0.90	0.20	0.10	0.50	1.00	22.70	
13	15.20	9.40	12.70	13.90	5.80	18.30	0.20	0.20	0.30	0.10	1.30	21.80	
14	10.50	9.40	7.50	16.60	8.48	13.20	0.10	0.10	0.30	0.20	1.30	20.90	
15	7.50	9.40	7.50	16.60	15.21	7.10	0.96	0.10	0.10	7.29	1.20	8.00	
16	10.50	8.40	15.20	21.00	5.80	4.70	1.00	0.10	0.20	11.30	1.00	3.80	
17	12.70	12.70	24.20	74.85	4.40	3.80	0.30	0.10	0.20	11.90	1.20	2.70	
18	5.80	12.70	21.00	41.80	2.60	2.40	0.20	0.10	0.20	8.50	1.00	2.70	
19	2.60	5.10	21.00	31.40	2.10	1.30	0.20	0.20	0.10	7.10	1.00	2.20	
20	0.70	1.30	21.00	24.20	1.70	3.96	0.60	0.20	0.10	1.80	1.60	2.20	
21	0.70	1.30	16.60	16.60	1.70	12.55	0.60	0.30	0.10	0.70	1.60	2.00	
22	0.70	2.10	10.50	18.00	1.70	3.20	0.30	0.30	33.24	0.80	1.20	1.80	
23	41.79	3.70	9.40	15.20	3.70	2.70	0.20	0.20	28.38	0.80	1.00	1.50	
24	44.10	5.10	7.50	11.60	3.70	2.20	0.20	0.10	2.00	1.20	1.30	1.20	
25	15.21	5.80	8.40	8.40	3.70	8.89	0.20	0.10	0.80	0.90	1.80	0.60	
26	12.70	5.10	11.60	9.40	4.40	4.70	0.20	0.10	0.20	3.90	1.60	0.60	
27	10.50	5.10	9.40	9.40	3.10	2.90	0.20	0.10	0.10	0.80	1.80	0.80	
28	11.60	6.60	18.00	6.60	3.70	1.80	1.00	0.10	0.10	0.70	1.60	1.80	
29	9.40		19.40	7.50	825.89	1.80	0.50	0.10	0.10	0.80	1.80	0.90	
30	6.60		25.90	158.12	51.42	2.51	0.30	0.20	0.10	0.30	1.60	5.50	
31	6.60		29.50		26.87		0.20	0.20		0.10		2.90	
MEAN	9.748	7.636	15.345	27.956	38.158	21.293	0.544	0.155	2.248	2.027	1.177	5.497	
INCHES	0.055	0.039	0.086	0.151	0.214	0.115	0.003	0.001	0.012	0.011	0.006	0.030	
STA AV	0.052	0.325	0.085	0.135	0.262	0.118	0.014	0.027	0.228	0.032	0.038	0.051	

NOTES: To convert mean daily discharge in CFS to IN/DAY, multiply by 0.0001806. To convert discharge in inches to AC-FT, multiply by 10,982. STA AV based on 8 yr (1963-70) record period.

1970	SELECTED RUNOFF EVENT			CHICKASHA, OKLAHOMA			WATERSHED 121 AT GRACEMONT			
ANTECEDENT CONDITIONS			RAINFALL			RUNOFF				
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)
EVENT OF MAY 28 - 29, 1970										
RG 000054			RG 000054							
5-28	0.0		5-28	2353	0.0	0.0	5-29	1	41.800	0.0
5-29		0.0	5-29	12	2.3842	0.66		30	65.500	0.0002
				17	1.2000	0.76		100	293.100	0.0009
				30	0.1385	0.79		130	759.100	0.0029
				38	0.1500	0.81		148	1595.000	0.0056
WATERSHED CONDITIONS:										
From a 1967 survey; sowed			42		0.7500	0.86		200	2069.898	0.0084
crop - 9%; row crop - 13%;			47		0.4800	0.90		212	2329.598	0.0117
alfalfa - 3%; pasture and			53		7.9000	1.69		236	1769.298	0.0179
range - 53%; and miscel-			102		6.3334	2.64		242	2084.600	0.0194
laneous - 22%.			114		3.2500	3.29		300	2994.198	0.0251
			118		3.9000	3.55		318	2675.698	0.0315
			124		3.4000	3.89		336	2334.500	0.0372
			132		1.4250	4.08		400	2522.099	0.0445
			141		1.0000	4.23		430	2478.098	0.0539
			152		0.9818	4.41		500	2515.198	0.0633
			202		0.9600	4.57		530	2347.898	0.0724
			217		0.4800	4.69		630	1806.300	0.0880
			225		0.7500	4.79		800	1340.898	0.1058
			251		0.1846	4.87		900	1121.598	0.1151
			322		0.0581	4.90		1030	738.698	0.1256
								1200	418.898	0.1321
								1330	268.100	0.1360
								1500	216.700	0.1387
								1800	170.900	0.1431

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.00007526.



EVENT OF MAY 28 - 29, 1970
CHICKASHA, OKLAHOMA WATERSHED 121 AT GRACEMONT

CHICKASHA, OKLAHOMA WATERSHED 513 NEAR TABLER

LOCATION: Beddingfield Watershed is the West branch of East Bitter Creek 1.4 miles above East Bitter Creek gaging station, in Grady County, Okla.; tributary to East Bitter Creek; Washita River; Red River Basin. GAGING STATION--SE1/4 sec. 22, T. 7 N., R. 6 W., lat. 35 deg. 03 min. 53 sec., long. 97 deg. 49 min. 13 sec.

AREA: 12314.00 acres 19.24 sq. miles

MONTHLY PRECIPITATION AND RUNOFF (inches)							CHICKASHA, OKLAHOMA WATERSHED 513 NEAR TABLER										
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual			
1970	P	0.10	0.62	2.09	2.76	4.04	1.25	1.55	2.46	7.10	2.75	1.03	0.31	26.06			
	Q	0.080	0.069	0.086	0.123	0.389	0.049	0.0	0.028	0.552	0.109	0.041	0.053	1.581			
STA AV	P	0.92	1.21	1.85	3.25	3.47	2.31	2.34	3.86	4.38	1.74	1.19	0.92	27.43			
	Q	0.096	0.100	0.164	0.431	0.356	0.208	0.098	0.229	0.257	0.060	0.068	0.069	2.136			
ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																	
		Maximum Discharge Rate		1 Hour Date Vol.		2 Hours Date Vol.		Maximum Volume for Selected Time Interval 6 Hours Date Vol.		12 Hours Date Vol.		1 Day Date Vol.		2 Days Date Vol.		8 Days Date Vol.	
1970		9-22	0.068	9-22	0.064	9-22	0.123	9-22	0.284	9-22	0.427	9-22	0.524	9-22	0.543	9-22	0.549
MAXIMUMS FOR PERIOD OF RECORD																	
		8-8 1965	0.169	8-8 1965	0.164	8-8 1965	0.307	8-7 1965	0.562	6-14 1969	0.611	6-14 1969	0.651	4-12 1967	0.754	4-9 1967	0.875

NOTES: Watershed conditions: From a 1967 survey; sowed crop - 5%; row crop - 1%; alfalfa - 2%; pasture and range - 90%; and miscellaneous - 2%. For maps of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1965, USDA Misc. Pub. 1216, p. 69.16-8 (Topography) and p. 69.7-21 (Composite). Precipitation data obtained from a Thiessen weighted average of 18 gages on the watershed. Precipitation and runoff records began Jan. 1965. For long-time precipitation records, see National Weather Service records at Chickasha, Okla.

1970	DAILY PRECIPITATION (inches)					CHICKASHA, OKLAHOMA WATERSHED 513 NEAR TABLER							
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
1	0.0	0.0	0.0	0.09	0.0	0.13	0.0	0.0	0.02	0.04	0.17	0.0	
2	0.0	0.0	0.01	0.0	0.0	0.05	0.0	0.0	0.05	0.0	0.0	0.0	
3	0.0	0.0	0.0	0.0	0.0	0.66	0.0	0.0	0.0	0.0	0.0	0.0	
4	0.0	0.0	0.0	0.26	0.0	0.27	0.0	0.0	0.0	0.0	0.0	0.0	
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.26	0.0	0.0	
6	0.0	0.0	0.60	0.0	0.0	0.0	0.04	0.0	0.0	0.0	0.0	0.0	
7	0.0	0.01	0.11	0.0	0.0	0.0	0.0	0.0	0.02	0.09	0.0	0.0	
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.58	0.0	0.0	
9	0.0	0.0	0.0	0.0	0.0	0.0	0.19	0.0	0.0	0.0	0.0	0.0	
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
11	0.0	0.0	0.0	0.0	0.0	0.03	0.03	0.0	0.07	0.0	0.0	0.0	
12	0.0	0.0	0.01	0.0	0.0	0.0	0.65	0.0	0.0	0.0	0.0	0.0	
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.48	0.0	0.86	0.0	
14	0.0	0.0	0.0	0.0	1.75	0.0	0.0	0.0	0.53	0.0	0.0	0.0	
15	0.0	0.0	0.0	0.0	0.11	0.0	0.0	0.0	0.0	0.0	0.0	0.24	
16	0.0	0.0	0.48	0.46	0.0	0.0	0.0	0.0	0.36	0.03	0.0	0.0	
17	0.09	0.0	0.0	0.01	0.0	0.0	0.0	0.0	0.34	0.14	0.0	0.0	
18	0.01	0.0	0.03	0.27	0.0	0.0	0.0	1.10	0.0	0.0	0.0	0.0	
19	0.0	0.0	0.14	0.0	0.0	0.0	0.0	1.14	0.0	0.0	0.0	0.0	
20	0.0	0.0	0.0	0.0	0.0	0.11	0.28	0.0	0.0	0.0	0.0	0.0	
21	0.0	0.0	0.07	0.0	0.0	0.0	0.0	0.01	0.0	0.0	0.0	0.07	
22	0.0	0.25	0.0	0.0	0.0	0.0	0.0	0.21	5.09	0.38	0.0	0.0	
23	0.0	0.06	0.0	0.0	0.0	0.0	0.0	0.0	0.07	0.02	0.0	0.0	
24	0.0	0.07	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.01	0.0	0.0	0.0	
26	0.0	0.0	0.0	0.08	0.0	0.0	0.0	0.0	0.06	0.0	0.0	0.0	
27	0.0	0.11	0.0	0.0	0.10	0.0	0.03	0.0	0.0	0.0	0.0	0.0	
28	0.0	0.12	0.62	0.0	0.0	0.0	0.33	0.0	0.0	0.0	0.0	0.0	
29	0.0	0.0	0.0	0.38	1.91	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
30	0.0	0.0	0.02	1.21	0.09	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
31	0.0	0.0	0.0	0.0	0.08	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
TOTAL	0.10	0.62	2.09	2.76	4.04	1.25	1.55	2.46	7.10	2.75	1.03	0.31	
STA AV	0.92	1.21	1.85	3.25	3.47	2.31	2.34	3.86	4.38	1.74	1.19	0.92	

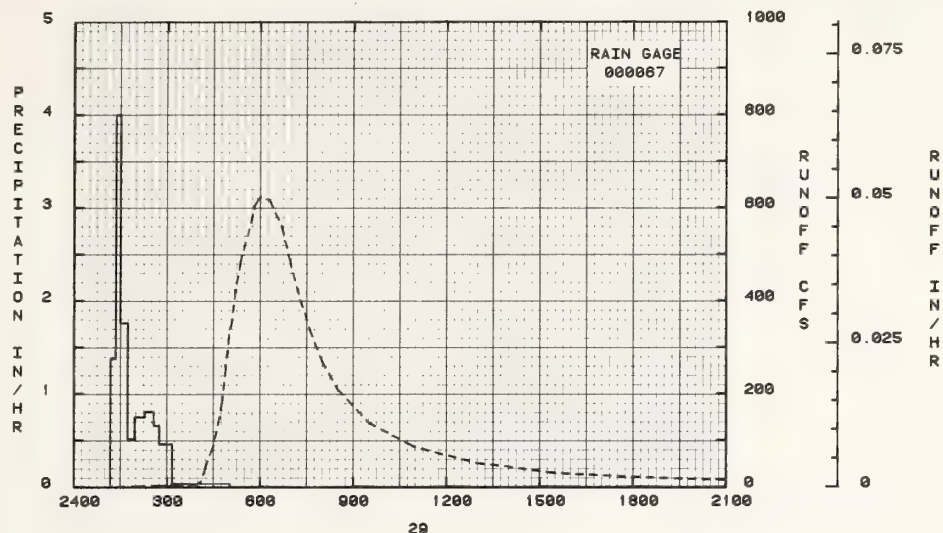
NOTES: For daily air temperatures in the vicinity, see table for Watershed W-700, (69.097) of this publication. Precipitation values are a Thiessen weighted average of 18 rain gages on the watershed. STA AV based on 6 yr (1965-70) record period.

1970 MEAN DAILY DISCHARGE (cfs) CHICKASHA, OKLAHOMA WATERSHED 513 NEAR TABLE												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	1.10	1.30	1.60	1.30	3.20	2.20	0.0	0.0	0.0	0.20	0.50	0.80
2	1.10	1.20	1.50	1.20	1.80	1.90	0.0	0.0	0.0	0.30	0.60	0.70
3	1.10	1.10	1.40	1.10	1.50	2.63	0.0	0.0	0.0	0.20	0.60	0.70
4	1.00	1.30	1.30	1.10	1.40	4.23	0.0	0.0	0.0	0.10	0.50	0.70
5	0.90	1.30	1.20	1.40	1.20	2.80	0.0	0.0	0.0	22.67	0.60	0.80
6	1.00	1.30	1.80	1.10	1.00	2.10	0.0	0.0	0.0	4.32	0.60	0.70
7	1.10	1.30	2.10	1.10	1.00	1.50	0.0	0.0	0.0	3.13	0.60	0.80
8	1.00	1.30	1.60	1.10	1.00	1.10	0.0	0.0	0.0	10.88	0.60	0.80
9	1.00	1.20	1.40	1.19	1.00	0.90	0.0	0.0	0.0	1.80	0.50	0.80
10	1.20	1.20	1.20	0.82	1.00	0.80	0.0	0.0	0.0	0.80	0.50	0.90
11	1.80	1.30	1.20	0.28	0.90	0.90	0.0	0.0	0.0	0.60	0.50	0.80
12	1.70	1.20	1.20	0.24	0.90	1.00	0.0	0.0	0.0	0.60	0.50	0.80
13	1.50	1.30	1.20	0.90	0.90	0.70	0.0	0.0	0.0	0.60	1.17	0.80
14	1.50	1.30	1.20	1.00	1.88	0.60	0.0	0.0	0.0	0.50	1.70	0.80
15	1.60	1.30	1.20	1.00	57.84	0.50	0.0	0.0	0.0	0.50	0.90	1.00
16	1.80	1.20	1.40	1.30	3.65	0.40	0.0	0.0	0.0	0.50	0.30	1.20
17	1.60	1.20	1.60	2.00	1.90	0.30	0.0	0.0	0.0	0.60	0.70	1.00
18	1.30	1.10	1.60	2.50	1.40	0.20	0.0	0.0	0.0	0.60	0.80	1.00
19	1.20	1.00	1.60	2.20	1.00	0.10	0.0	14.22	0.0	3.60	0.70	0.90
20	1.30	1.00	1.50	1.30	1.00	0.10	0.0	0.30	0.0	0.50	0.60	0.90
21	1.30	1.10	1.50	1.10	0.70	0.10	0.0	0.0 T	0.0	0.50	0.70	1.00
22	1.30	1.30	1.40	1.10	0.60	0.10	0.0	0.0	234.50	0.60	0.60	1.10
23	1.50	1.50	1.50	1.10	0.60	0.10	0.0	0.0	75.19	1.30	0.50	0.90
24	1.70	1.50	1.30	1.19	0.60	0.10	0.0	0.0	3.11	0.70	0.60	0.90
25	1.70	1.30	1.20	1.10	0.60	0.0 T	0.0	0.0	1.10	0.60	0.60	0.90
26	1.50	1.70	1.10	1.10	0.50	0.10	0.0	0.0	0.60	0.60	0.80	0.90
27	1.40	1.40	1.10	1.30	0.60	0.0 T	0.0	0.0	0.40	0.40	0.80	0.90
28	1.50	1.70	1.80	1.10	0.70	0.0	0.0	0.0	0.30	0.40	0.80	1.00
29	1.30		1.90	1.30	100.35	0.0	0.0	0.0	0.30	0.50	0.80	1.00
30	1.30		1.50	29.18	7.98	0.0	0.0	0.0	0.20	0.50	0.90	1.00
31	1.30		1.30		2.80	0.0	0.0	0.0		0.40		1.00
MEAN	1.3419	1.2821	1.4323	2.1203	6.5002	0.8486	0.0	0.4684	9.5232	1.8227	0.7022	0.8871
INCHES	0.080	0.069	0.086	0.123	0.389	0.049	0.0	0.028	0.552	0.109	0.041	0.053
STA AV	0.096	0.100	0.164	0.431	0.356	0.208	0.098	0.229	0.257	0.060	0.068	0.069

NOTES: To convert mean daily discharge in CFS to IN/DAY, multiply by 0.001933. To convert discharge in inches to AC-FT, multiply by 1,026. STA AV based on 6 yr (1965-70) record period.

1970	SELECTED RUNOFF EVENT			CHICKASHA, OKLAHOMA			WATERSHED 513 NEAR TABLE			
ANTECEDENT CONDITIONS			RAINFALL			RUNOFF				
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)
EVENT OF MAY 29, 1970										
RG 000067			RG 000067							
5-29	0.0	0.000	5-29	110	0.0	0.0	5-29	124	1.000	0.0
				120	1.3800	0.23		154	1.100	0.0
				129	4.0000	0.83		218	1.900	0.0
				144	1.7600	1.27		236	2.900	0.0001
				157	0.5077	1.38		300	2.800	0.0002
WATERSHED CONDITIONS:										
From a 1967 survey; sowed				217	0.7500	1.63		306	3.200	0.0002
crop - 5%; row crop - 1%;				234	0.8118	1.86		330	3.200	0.0003
alfalfa - 2%; pasture and				245	0.6545	1.98		354	2.900	0.0004
range - 90%; and miscel-				310	0.4560	2.17		406	11.700	0.0005
laneous - 2%.				503	0.0319	2.23		412	32.700	0.0007
								418	55.300	0.0011
								430	89.000	0.0023
								442	150.700	0.0042
								448	193.700	0.0056
								454	263.000	0.0074
								503	325.898	0.0098
								506	360.600	0.0126
								512	423.698	0.0158
								524	496.398	0.0232
								542	570.100	0.0361
								548	602.800	0.0408
								600	624.198	0.0507
								618	615.000	0.0657
								642	557.398	0.0846
								700	473.198	0.0971
								718	400.198	0.1076
								736	337.198	0.1165
								800	268.898	0.1263
								830	208.500	0.1359
								930	137.400	0.1498
								1100	84.200	0.1632
								1300	50.400	0.1740
								1530	28.700	0.1820

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.0008054.



EVENT OF MAY 29, 1970
CHICKASHA, OKLAHOMA WATERSHED 513 NEAR TABLER

1970 SELECTED RUNOFF EVENT

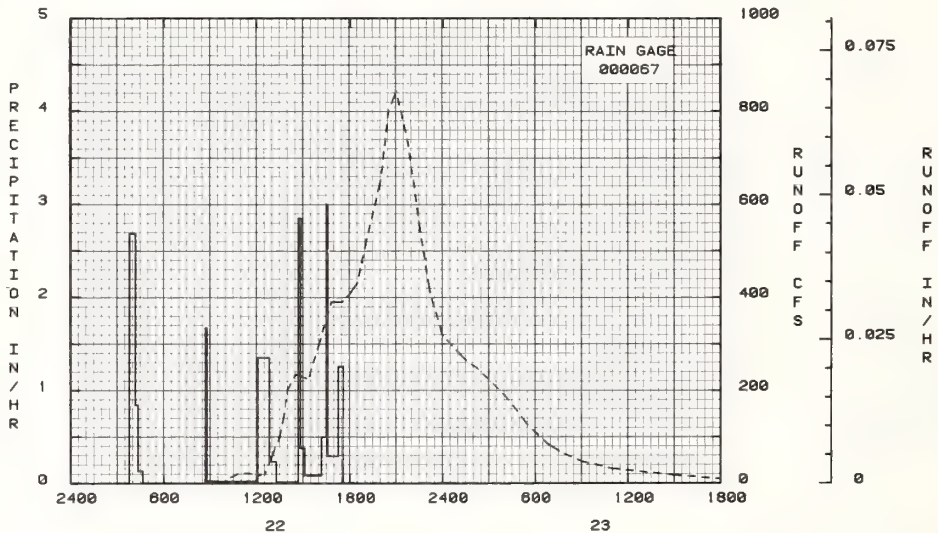
CHICKASHA, OKLAHOMA WATERSHED 513 NEAR TABLER

ANTECEDENT CONDITIONS			RAINFALL			RUNOFF		
Date	Rainfall	Runoff	Date	Time	Intensity	Date	Time	Rate
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	Mo-Day	of Day	(cfs)
EVENT OF SEPTEMBER 22 - 23, 1970								
9-22	RG 000067 0.0	0.0	9-22	347	0.0	9-22	954	0.100
				410	2.6870		1000	3.000
				420	0.8400		1018	13.100
				438	0.1333		1048	21.400
				714	0.0038		1112	22.200
				842	0.0		1212	17.400
				847	1.6800		1218	19.200
				1204	0.0213		1230	18.500
				1250	1.3565		1236	25.600
				1316	0.2308		1254	50.400
				1442	0.0140		1312	77.800
				1450	2.8500		1330	100.100
				1506	0.3750		1348	150.700
				1611	0.0831		1400	201.800
				1629	0.5000		1430	234.700
				1635	2.9998		1512	225.800
				1716	0.2927		1524	231.100
				1736	1.2600		1600	297.600
							1648	390.100
							1730	390.100
							1800	408.000
							1830	431.698
							1900	511.198
							2000	652.600
							2030	802.198
							2100	842.498
							2148	725.000
							2230	555.300
							2312	410.500
							2400	319.198
			9-23	130	264.898			0.2582
				218	245.800			0.4308
				400	190.500			0.4472
				530	126.200			0.4771
				612	103.300			0.4962
								0.5027

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.00008054.

1970			SELECTED RUNOFF EVENT				CHICKASAW, OKLAHOMA				WATERSHED 513 NEAR TABLER			
ANTECEDENT CONDITIONS			RAINFALL				RUNOFF							
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.				
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)				
EVENT OF SEPTEMBER 22 - 23, 1970 (CONTINUED)														
							9-23	648	85.100	0.5072				
								730	70.000	0.5116				
								900	47.100	0.5187				
								1100	31.700	0.5250				

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.00008054.



EVENT OF SEPTEMBER 22 - 23, 1970
CHICKASAW, OKLAHOMA WATERSHED 513 NEAR TABLER

CHICKASHA, OKLAHOMA WATERSHED 311 NEAR POCASSET

LOCATION: Salt Creek Watershed 1/2 mile East of U.S. highway 81 near Pocasset, in Grady County, Okla.; tributary to Washita River; Red River Basin. GAGING STATION--NW1/4 sec. 28, T. 8 N., R. 7 W., lat. 35 deg. 08 min. 44 sec., long. 97 deg. 57 min. 30 sec.

AREA: 15206.00 acres 23.76 sq. miles

MONTHLY PRECIPITATION AND RUNOFF (inches)						CHICKASHA, OKLAHOMA		WATERSHED 311 NEAR POCASSET								
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual			
1970	P 0.09	0.38	2.35	4.67	4.86	2.90	1.20	2.11	3.64	2.28	0.59	0.28	25.35			
	Q 0.006	0.003	0.006	0.605	0.963	0.408	0.002	0.020	0.613	0.063	0.003	0.005	2.097			
STA AV	P 0.74	0.87	1.82	4.28	4.53	3.15	1.68	2.16	4.08	2.21	1.32	0.72	27.55			
	Q 0.010	0.010	0.022	0.754	0.724	0.198	0.005	0.007	0.029	0.097	0.028	0.009	1.892			
ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																
	Maximum Discharge		1 Hour		2 Hours		Maximum Volume for Selected Time Interval		6 Hours		12 Hours		2 Days		8 Days	
	Date	Rate	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.
1970	5-29	0.089	5-29	0.089	5-29	0.176	5-29	0.488	5-29	0.686	5-29	0.740	5-29	0.762	5-29	0.780
MAXIMUMS FOR PERIOD OF RECORD																
	4-12	0.320	4-12	0.314	4-12	0.600	4-12	1.201	4-12	1.310	4-12	1.338	4-12	1.424	4- 9	1.720
	1967		1967		1967		1967		1967		1967		1967		1967	

NOTES: Watershed conditions: 36% of area in cultivation (alfalfa, sowed crops and row crops; the pasture or range land (64%) is mostly short grass on moderately steep slopes. About 10% is severely eroded. For maps of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1967, USDA Misc. Pub. 1262, p. 69.27-4 (Topography) and 1965, USDA Misc. Pub. 1216, p. 69.7-21 (Composite). Precipitation data obtained from a Thiessen weighted average of 9 gages on the watershed. Precipitation and runoff records began Jan. 1967. For long-time precipitation records, see National Weather Service records at Chickasha, Okla.

1970	DAILY PRECIPITATION (inches)												CHICKASHA, OKLAHOMA WATERSHED 311 NEAR POCASSET	
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
1	0.0	0.0	0.0	0.25	0.0	0.13	0.0	0.04	0.0	0.01	0.16	0.0		
2	0.0	0.0	0.0	0.0	0.0	0.32	0.0	0.0	0.01	0.0	0.0	0.0		
3	0.0	0.0	0.0	0.0	0.0	0.42	0.02	0.0	0.23	0.0	0.0	0.0		
4	0.0	0.0	0.0	0.26	0.0	0.10	0.01	0.0	0.0	0.0	0.0	0.0		
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.34	0.0	0.0		
6	0.0	0.0	0.87	0.0	0.0	0.0	0.15	0.0	0.0	0.0	0.0	0.0		
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
8	0.0	0.02	0.0	0.0	0.0	0.0	0.0	0.0	0.11	0.61	0.0	0.0		
9	0.0	0.0	0.0	0.0	0.0	0.0	0.05	0.03	0.0	0.0	0.0	0.0		
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
11	0.0	0.0	0.0	0.0	0.0	1.65	0.04	0.0	0.02	0.0	0.0	0.0		
12	0.0	0.0	0.0	0.0	0.0	0.0	0.33	0.0	0.0	0.0	0.0	0.0		
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.45	0.0	0.43	0.0		
14	0.0	0.0	0.0	0.0	1.67	0.0	0.0	0.0	0.10	0.0	0.0	0.0		
15	0.0	0.0	0.0	0.0	0.06	0.0	0.01	0.0	0.0	0.0	0.0	0.21		
16	0.0	0.0	0.46	0.42	0.0	0.0	0.0	0.0	0.23	0.04	0.0	0.0		
17	0.08	0.0	0.0	0.05	0.0	0.0	0.0	0.0	0.01	0.24	0.0	0.0		
18	0.01	0.0	0.02	0.04	0.0	0.0	0.0	1.76	0.0	0.0	0.0	0.0		
19	0.0	0.0	0.16	0.0	0.0	0.0	0.0	0.25	0.0	0.0	0.0	0.0		
20	0.0	0.0	0.0	0.0	0.0	0.28	0.24	0.0	0.0	0.0	0.0	0.03		
21	0.0	0.0	0.07	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.04		
22	0.0	0.14	0.0	0.0	0.0	0.0	0.0	0.03	2.44	0.0	0.0	0.0		
23	0.0	0.03	0.0	0.0	0.0	0.0	0.0	0.0	0.03	0.04	0.0	0.0		
24	0.0	0.03	0.0	0.0	0.01	0.30	0.0	0.0	0.0	0.0	0.0	0.0		
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
26	0.0	0.0	0.0	0.08	0.0	0.0	0.0	0.0	0.01	0.0	0.0	0.0		
27	0.0	0.0	0.0	0.05	0.0	0.0	0.15	0.0	0.0	0.0	0.0	0.0		
28	0.0	0.15	0.55	0.0	0.29	0.0	0.20	0.0	0.0	0.0	0.0	0.0		
29	0.0		0.0	1.89	2.78	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
30	0.0		0.16	1.68	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
31	0.0		0.06		0.0		0.0	0.0		0.0		0.0		
TOTAL	0.09	0.38	2.35	4.67	4.86	2.90	1.20	2.11	3.64	2.28	0.59	0.28		
STA AV	0.74	0.87	1.82	4.28	4.53	3.15	1.68	2.16	4.08	2.21	1.32	0.72		

NOTES: For daily air temperatures in the vicinity, see table for Watershed W-700, (69.007) of this publication. Precipitation values are a Thiessen weighted average of 9 rain gages on the watershed. STA AV based on 4 yr (1967-70) record period.

1970 MEAN DAILY DISCHARGE (cfs) CHICKASHA, OKLAHOMA WATERSHED 311 NEAR POCASSET												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.10	0.10	0.10	0.20	13.70	2.20	0.10	0.0	0.0	0.0	0.0	0.10
2	0.10	0.10	0.10	0.20	2.80	1.70	0.10	0.0	0.0	0.0	0.0	0.10
3	0.10	0.0 T	0.10	0.20	1.60	1.40	0.10	0.0	0.0	0.0	0.0	0.10
4	0.10	0.0	0.10	0.20	1.23	2.20	0.10	0.0	0.0	0.0	0.0	0.10
5	0.10	0.0	0.10	0.20	0.90	1.40	0.10	0.0	0.0	0.76	0.0	0.10
6	0.10	0.0	0.30	0.20	0.60	1.10	0.10	0.0	0.0	13.95	0.0	0.10
7	0.10	0.0	0.20	0.20	0.50	0.90	0.10	0.0	0.0	3.49	0.10	0.0 T
8	0.10	0.0	0.10	0.20	0.40	0.70	0.0 T	0.0	0.0	12.10	0.10	0.10
9	0.10	0.0	0.10	0.20	0.30	0.50	0.0	0.0	0.0	6.94	0.0 T	0.10
10	0.20	0.10	0.10	0.20	0.30	0.40	0.10	0.0	0.0	1.80	0.0	0.10
11	0.30	0.10	0.10	0.10	0.30	165.22	0.10	0.0	0.0	0.60	0.0	0.10
12	0.20	0.0 T	0.10	0.10	0.20	66.96	0.10	0.0	0.0	0.20	0.0	0.10
13	0.20	0.10	0.10	0.10	0.20	5.10	0.10	0.0	0.0	0.10	0.10	0.10
14	0.20	0.10	0.10	0.10	18.84	1.90	0.0 T	0.0	0.0	0.10	0.20	0.10
15	0.20	0.10	0.10	0.10	73.99	1.60	0.0	0.0	0.0	0.0 T	0.10	0.10
16	0.10	0.10	0.10	0.10	4.85	1.20	0.0	0.0	0.0	0.0	0.10	0.10
17	0.10	0.10	0.10	0.10	1.30	0.80	0.0	0.0	0.0	0.10	0.10	0.10
18	0.10	0.10	0.10	0.10	0.70	0.60	0.0	0.0	0.0	0.10	0.10	0.10
19	0.10	0.10	0.10	0.10	0.40	0.50	0.0	8.27	0.0	0.0 T	0.10	0.10
20	0.10	0.10	0.10	0.10	0.40	0.50	0.0	4.26	0.0	0.0	0.10	0.10
21	0.10	0.0 T	0.10	0.10	0.30	1.10	0.0	0.20	0.0	0.0	0.10	0.10
22	0.20	0.10	0.10	0.10	0.20	0.50	0.0	0.0 T	4.60	0.0	0.10	0.10
23	0.10	0.10	0.10	0.0 T	0.20	0.40	0.0	0.0	3.34	0.0	0.10	0.10
24	0.10	0.10	0.10	0.0	0.29	0.40	0.0	0.0	0.0 T	0.0	0.10	0.10
25	0.20	0.10	0.10	0.10	0.10	0.40	0.0	0.0	0.0	0.0	0.10	0.10
26	0.10	0.10	0.10	0.10	0.10	0.30	0.0	0.0	0.0	0.0	0.10	0.10
27	0.10	0.10	0.10	0.10	0.10	0.30	0.0	0.0	0.0	0.0	0.10	0.20
28	0.10	0.10	0.30	0.10	0.10	0.20	0.0	0.0	0.0	0.0	0.10	0.20
29	0.10		0.20	9.71	470.82	0.10	0.0	0.0	0.0	0.0	0.10	0.20
30	0.0 T		0.20	373.18	16.05	0.10	0.0	0.0	0.0	0.0	0.10	0.20
31	0.0		0.20		3.54		0.0	0.0	0.0	0.0		0.20
MEAN	0.123	0.068	0.126	12.883	19.844	8.690	0.036	0.411	0.271	1.298	0.070	0.113
INCHES	0.006	0.003	0.006	0.605	0.963	0.408	0.002	0.020	0.013	0.063	0.003	0.005
STA AV	0.010	0.010	0.022	0.754	0.724	0.198	0.005	0.007	0.029	0.097	0.028	0.009

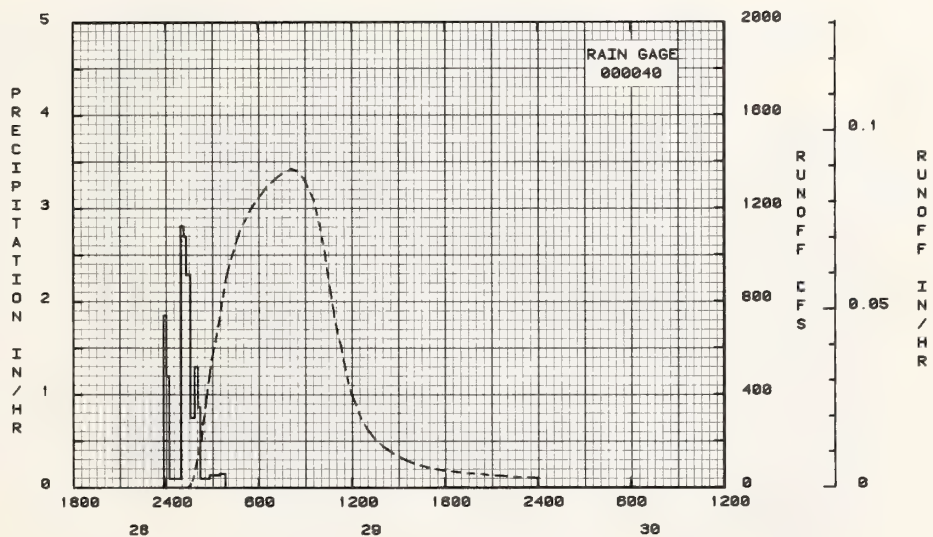
NOTES: To convert mean daily discharge in CPS to IN/DAY, multiply by 0.001565. To convert discharge in inches to AC-PT, multiply by 1,267. STA AV based on 4 yr (1967-70) record period.

1970 SELECTED RUNOFF EVENT CHICKASHA, OKLAHOMA WATERSHED 311 NEAR POCASSET												
ANTECEDENT CONDITIONS			RAINFALL				RUNOFF					
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.		
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)		
EVENT OF MAY 28 - 29, 1970												
5-28	RG 000040		5-28	RG 000040			5-29	106	0.200	0.0		
5-29	0.0		5-29	2350	0.0	0.0		124	2.500	0.0		
		0.0		1	1.8545	0.34		130	5.800	0.0		
				11	1.2000	0.54		136	16.300	0.0001		
				56	0.0933	0.61		142	29.900	0.0003		
				109	2.8154	1.22						
WATERSHED CONDITIONS:				119	2.7000	1.67		148	50.800	0.0006		
36% of area in cultivation,				135	2.2875	2.28		154	90.700	0.0011		
alfalfa, sowed crops and				151	0.7500	2.48		200	117.400	0.0018		
row crops; the pasture or				203	1.3000	2.74		206	146.000	0.0027		
range land (64%) is mostly				212	0.8667	2.87		212	177.700	0.0038		
short grass on moderately												
steep slopes. About 10% is				249	0.0973	2.93		218	212.400	0.0051		
severely eroded.				329	0.1350	3.02		224	277.000	0.0067		
				349	0.1500	3.07		230	313.800	0.0086		
								236	373.198	0.0108		
								242	422.800	0.0134		
								248	475.000	0.0163		
								254	521.898	0.0196		
								306	602.100	0.0269		
								318	664.800	0.0352		
								324	702.898	0.0397		
								330	735.198	0.0444		
								342	825.300	0.0546		
								354	905.500	0.0659		
								406	956.600	0.0780		
								424	1022.998	0.0974		
								448	1106.998	0.1252		
								530	1200.698	0.1779		
								630	1292.600	0.2592		
								730	1350.898	0.3454		
								806	1369.898	0.3986		
								830	1361.500	0.4342		
								900	1320.698	0.4779		
								936	1231.698	0.5278		
								1000	1106.898	0.5583		
								1018	1003.898	0.5789		

NOTES: To convert runoff in CPS to IN/HR, multiply by 0.00006522.

1970	SELECTED RUNOFF EVENT			CHICKASHA, OKLAHOMA WATERSHED 311 NEAR POCASSET						
ANTECEDENT CONDITIONS			RAINFALL			RUNOFF				
Date Mo-Day	Rainfall (inches)	Runoff (inches)	Date Mo-Day	Time of Day	Intensity (in/hr)	Acc. (inches)	Date Mo-Day	Time of Day	Rate (cfs)	Acc. (inches)
EVENT OF MAY 28 - 29, 1970 (CONTINUED)										
				5-29				1030	902.500	0.5913
								1042	815.300	0.6025
								1054	734.198	0.6126
								1106	662.398	0.6217
								1118	610.898	0.6300
								1130	546.698	0.6376
								1136	507.398	0.6410
								1148	448.600	0.6472
								1200	399.398	0.6527
								1218	353.398	0.6601
								1236	296.198	0.6665
								1300	252.500	0.6737
								1330	208.900	0.6812
								1400	176.900	0.6875
								1442	143.600	0.6948
								1524	120.600	0.7008
								1600	103.300	0.7052
								1700	84.500	0.7113
								1800	71.700	0.7164
								1900	63.400	0.7208

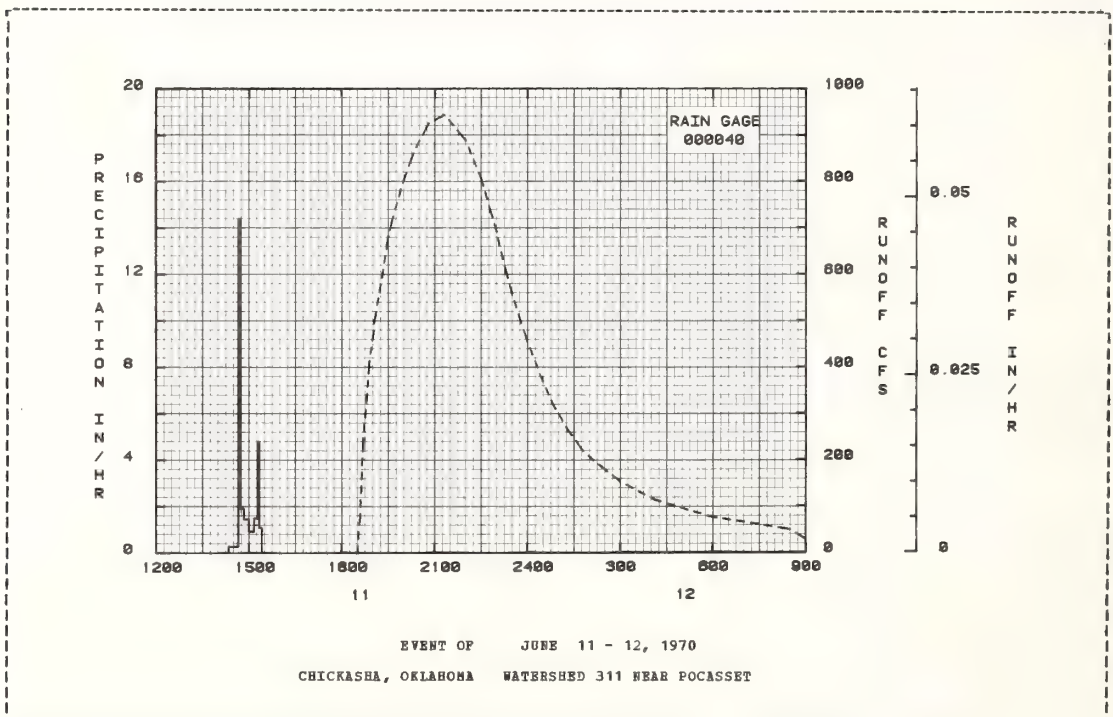
NOTES: To convert runoff in CPS to IN/HR, multiply by 0.00006522.



EVENT OF MAY 28 - 29, 1970
CHICKASHA, OKLAHOMA WATERSHED 311 NEAR POCASSET

1970	SELECTED RUNOFF EVENT			CHICKASHA, OKLAHOMA WATERSHED 311 NEAR POCASSET						
ANTECEDENT CONDITIONS			RAINFALL			RUNOFF				
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)
EVENT OF JUNE 11 - 12, 1970										
RG 000040			RG 000040							
6-11	0.0	0.001	6-11	1420	0.0	0.0	6-11	1830	0.400	0.0
				1439	0.2842	0.09		1836	83.800	0.0003
				1444	14.4001	1.29		1842	248.600	0.0014
				1450	1.9000	1.48		1848	327.898	0.0033
				1500	1.4400	1.72		1854	414.000	0.0057
WATERSHED CONDITIONS: 36% of area in cultivation, alfalfa, sowed crops and row crops; the pasture or range land (64%) is mostly short grass on moderately steep slopes. About 10% is severely eroded.				1510	0.9000	1.87		1900	464.600	0.0086
				1518	1.5000	2.07		1906	519.698	0.0118
				1520	4.7999	2.23		1918	595.800	0.0191
				1525	1.0800	2.32		1930	682.300	0.0274
								1936	711.100	0.0319
								2000	805.500	0.0517
								2018	861.000	0.0680
								2048	926.000	0.0971
								2118	943.600	0.1276
								2200	887.800	0.1694
								2230	805.300	0.1970
								2248	736.898	0.2121
								2300	691.100	0.2214
								2318	605.500	0.2341
								2330	556.698	0.2417
								2348	493.898	0.2520
								2400	454.600	0.2582
							6-12	30	368.198	0.2716
								48	322.198	0.2783
								118	264.500	0.2879
								148	218.200	0.2958
								224	183.700	0.3037
								300	152.000	0.3103
								406	113.100	0.3198
								554	77.100	0.3310

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.00006522.



CHICKASHA, OKLAHOMA WATERSHED C-1

LOCATION: Grady County, Oklahoma; SW 1/4 sec. 26, R. 7 W., T. 7 N., about 2 miles Southeast of Chickasha, Oklahoma; Washita River Basin.

AREA: 17.83 acres

MONTHLY PRECIPITATION AND RUNOFF (inches)														CHICKASHA, OKLAHOMA WATERSHED C-1	
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual	
1970	P	0.11	0.49	2.80	2.33	3.75	1.27	1.00	1.29	5.03	1.87	0.93	0.34	21.21	
	Q	0.0	0.0	0.0	0.007	0.576	0.0	0.0	0.0	0.947	0.016	0.0	0.0	1.546	
STA AV	P	0.87	1.03	1.96	2.98	3.42	2.27	1.76	4.07	3.96	1.59	1.13	0.73	25.76	
	Q	0.0	0.001	0.007	0.044	0.323	0.140	0.057	0.488	0.285	0.068	0.150	0.0	1.563	
ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS															
		Maximum Discharge		1 Hour		2 Hours		Maximum Volume for Selected Time Interval		6 Hours		12 Hours		1 Day	
		Date	Rate	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.
1970		5-14	0.057	5-14	0.049	5-22	0.094	5-22	0.267	5-22	0.496	5-22	0.820	5-22	0.946
		4-12	0.081	8-28	0.065	8-28	0.128	8-28	0.349	8-28	0.614	8-28	0.920	8-28	1.049
		1967		1965		1965		1965		1965		1965		1965	
MAXIMUMS FOR PERIOD OF RECORD															
		4-12	0.081	8-28	0.065	8-28	0.128	8-28	0.349	8-28	0.614	8-28	0.920	8-28	1.049
		1967		1965		1965		1965		1965		1965		1965	

NOTES: Watershed conditions: Continuous cotton - tillage during fallow period consisted of shredding stalks, disking, chiseling, spring-tooth harrowing and spike-tooth harrowing. Cotton was planted during mid-June. Tillage during the growing season consisted of rotary hoeing and cultivating. Principal drain with less than 0.05 ft. grade per 100 feet was maintained during the growing season by use of field cultivator. For general description and map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1965, USDA Misc. Pub. 1216, pp. 69.30-1 and 69.30-3. Monthly precipitation values obtained from one recording rain gage, No. 173, located near the 1.5 ft. H-flume. Precipitation and runoff records began January 1, 1965. STA AV based on 6 yr (1965-70) record period. For long-time precipitation records, see National Weather Service records at Chickasha, Okla.

1970 DAILY PRECIPITATION (inches)														CHICKASHA, OKLAHOMA WATERSHED C-1	
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec			
1	0.0	0.0	0.0	0.11	0.0	0.34	0.0	0.0	0.0	0.04	0.14	0.0			
2	0.0	0.0	0.0	0.0	0.0	0.02	0.0	0.0	0.02	0.0	0.0	0.0			
3	0.0	0.0	0.0	0.0	0.0	0.36	0.0	0.0	0.0	0.0	0.0	0.0			
4	0.0	0.0	0.0	0.21	0.0	0.17	0.0	0.0	0.0	0.0	0.0	0.0			
5	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.3	0.0	0.68	0.0	0.0			
6	0.0	0.0	1.05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
7	0.0	0.0	0.22	0.0	0.0	0.0	0.0	0.0	0.07	0.15	0.0	0.0			
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.39	0.0	0.0			
9	0.0	0.0	0.0	0.0	0.0	0.0	0.15	0.0	0.0	0.0	0.0	0.0			
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
11	0.0	0.0	0.0	0.0	0.0	0.02	0.05	0.0	0.0	0.0	0.0	0.0			
12	0.0	0.0	0.0	0.0	0.0	0.0	0.45	0.0	0.0	0.0	0.0	0.0			
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.45	0.0	0.79	0.0			
14	0.0	0.0	0.0	0.0	2.80	0.0	0.0	0.0	0.05	0.0	0.0	0.0			
15	0.0	0.0	0.0	0.0	0.11	0.0	0.0	0.0	0.0	0.0	0.0	0.25			
16	0.0	0.0	0.54	0.37	0.0	0.0	0.0	0.0	0.48	0.05	0.0	0.0			
17	0.10	0.0	0.0	0.01	0.0	0.0	0.0	0.0	0.15	0.16	0.0	0.0			
18	0.01	0.0	0.05	0.0	0.0	0.0	0.0	0.65	0.0	0.0	0.0	0.0			
19	0.0	0.0	0.18	0.0	0.0	0.0	0.0	0.45	0.0	0.0	0.0	0.0			
20	0.0	0.0	0.0	0.0	0.0	0.36	0.20	0.0	0.0	0.0	0.0	0.02			
21	0.0	0.0	0.09	0.0	0.0	0.0	0.0	0.18	0.0	0.0	0.0	0.07			
22	0.0	0.12	0.0	0.0	0.0	0.0	0.0	0.01	3.74	0.38	0.0	0.0			
23	0.0	0.07	0.0	0.0	0.04	0.0	0.0	0.0	0.03	0.02	0.0	0.0			
24	0.0	0.05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
26	0.0	0.0	0.0	0.29	0.0	0.0	0.0	0.0	0.04	0.0	0.0	0.0			
27	0.0	0.15	0.0	0.0	0.04	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
28	0.0	0.16	0.64	0.0	0.0	0.0	0.15	0.0	0.0	0.0	0.0	0.0			
29	0.0	0.0	0.36	0.76	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
30	0.0	0.0	0.98	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
31	0.0	0.0	0.03	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
TOTAL	0.11	0.49	2.80	2.33	3.75	1.27	1.00	1.29	5.03	1.87	0.93	0.34			
STA AV	0.87	1.03	1.96	2.98	3.42	2.27	1.76	4.07	3.96	1.59	1.13	0.73			

NOTES: Values obtained from one recording rain gage, No. 173. STA AV based on 6 yr (1965-70) record period.

CHICKASHA, OKLAHOMA WATERSHED C-2

LOCATION: Grady County, Oklahoma; SE 1/4, sec. 4, R. 8 W., T. 7 N., about 6 miles West and 4 miles North of Chickasha Oklahoma; Washita River Basin.

AREA: 32.54 acres

MONTHLY PRECIPITATION AND RUNOFF (inches)														CHICKASHA, OKLAHOMA WATERSHED C-2															
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual															
1970	P	0.10	0.34	2.44	3.95	3.38	0.78	1.58	0.60	3.44	1.74	0.47	0.21	19.03															
	Q	0.0	0.0	0.0	0.010	0.002	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.012															
STA AV	P	0.67	0.99	1.57	3.00	3.33	2.98	1.64	2.62	3.51	1.39	1.71	0.73	24.12															
	Q	0.0	0.0	0.0	0.027	0.082	0.068	0.0	0.004	0.004	0.003	0.0	0.020	0.209															
ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																													
		Maximum Discharge		1 Hour		2 Hours		Maximum Volume for Selected Time Interval		12 Hours		1 Day		2 Days		8 Days													
		Date	Rate	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.												
1970		4-30	0.002	4-30	0.002	4-30	0.004	4-30	0.008	4-29	0.010	4-29	0.010	4-29	0.010	4-29	0.010												
MAXIMUMS FOR PERIOD OF RECORD																													
		4-12	0.099	4-12	0.075	5- 5	0.115	5- 5	0.225	5- 4	0.294	5- 6	0.375	5- 5	0.550	5- 3	0.728												
		1967		1967		1969		1969		1969		1969		1969		1969													

NOTES: Watershed conditions: 100% cropland. Entire watershed seeded to wheat in the fall of 1969 and harvested in mid-June 1970. For general description of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1965, USDA Misc. Pub. 1216, pp. 69.31-1 and 69.31-3. Monthly precipitation values obtained from one weighting type rain gage, No. 174. Precipitation and runoff records began May 1, 1962. STA AV based on 9 yr (1962-70) record period. For long-time precipitation records, see National Weather Service records at Chickasha, Okla.

1970		DAILY PRECIPITATION (inches)						CHICKASHA, OKLAHOMA						WATERSHED C-2	
	Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
	1	0.0	0.0	0.0	0.20	0.0	0.14	0.0	0.0	0.0	0.03	0.15	0.0		
	2	0.0	0.0	0.0	0.0	0.0	0.01	0.0	0.0	0.0	0.0	0.0	0.0		
	3	0.0	0.0	0.0	0.0	0.0	0.15	0.0	0.0	0.0	0.0	0.0	0.0		
	4	0.0	0.0	0.0	0.18	0.0	0.05	0.0	0.0	0.0	0.0	0.0	0.0		
	5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.89	0.0	0.0		
	6	0.0	0.0	1.10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
	7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
	8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.05	0.56	0.0	0.0		
	9	0.0	0.0	0.0	0.0	0.0	0.0	0.04	0.0	0.0	0.0	0.0	0.0		
	10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
	11	0.0	0.0	0.0	0.0	0.0	0.24	0.11	0.0	0.0	0.0	0.0	0.0		
	12	0.0	0.0	0.0	0.0	0.0	0.0	0.35	0.0	0.0	0.0	0.0	0.0		
	13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.53	0.0	0.32	0.0		
	14	0.0	0.0	0.0	0.0	1.05	0.0	0.0	0.0	0.04	0.0	0.0	0.0		
	15	0.0	0.0	0.0	0.0	0.08	0.0	0.0	0.0	0.0	0.0	0.0	0.13		
	16	0.0	0.0	0.42	0.22	0.0	0.0	0.0	0.0	0.27	0.05	0.0	0.0		
	17	0.09	0.0	0.0	0.03	0.0	0.0	0.0	0.0	0.0	0.21	0.0	0.0		
	18	0.01	0.0	0.0	0.03	0.0	0.0	0.0	0.08	0.0	0.0	0.0	0.0		
	19	0.0	0.0	0.18	0.0	0.0	0.0	0.02	0.34	0.0	0.0	0.0	0.0		
	20	0.0	0.0	0.0	0.0	0.0	0.14	0.19	0.09	0.0	0.0	0.0	0.03		
	21	0.0	0.0	0.08	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.05		
	22	0.0	0.10	0.0	0.0	0.0	0.0	0.0	0.09	2.49	0.0	0.0	0.0		
	23	0.0	0.04	0.0	0.0	0.0	0.0	0.0	0.0	0.02	0.0	0.0	0.0		
	24	0.0	0.05	0.0	0.0	0.0	0.05	0.0	0.0	0.0	0.0	0.0	0.0		
	25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
	26	0.0	0.0	0.0	0.18	0.0	0.0	0.0	0.0	0.04	0.0	0.0	0.0		
	27	0.0	0.02	0.0	0.0	0.0	0.0	0.04	0.0	0.0	0.0	0.0	0.0		
	28	0.0	0.13	0.58	0.0	0.06	0.0	0.83	0.0	0.0	0.0	0.0	0.0		
	29	0.0		0.0	1.73	2.19	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
	30	0.0		0.05	1.38	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
	31	0.0		0.03		0.0		0.0	0.0		0.0		0.0		
TOTAL		0.10	0.34	2.44	3.95	3.38	0.78	1.58	0.60	3.44	1.74	0.47	0.21		
STA AV		0.67	0.99	1.57	3.00	3.33	2.98	1.64	2.62	3.51	1.39	1.71	0.73		

NOTES: Values obtained from one weighting type rain gage, No. 174. STA AV based on 9 yr (1962-70) record period.

CHICKASHA, OKLAHOMA WATERSHED C-3

LOCATION: Grady County, Oklahoma; NE 1/4 sec. 35, E. 7 W., T. 7 N., about 2-1/2 miles Southeast of Chickasha, Oklahoma; Washita River Basin.

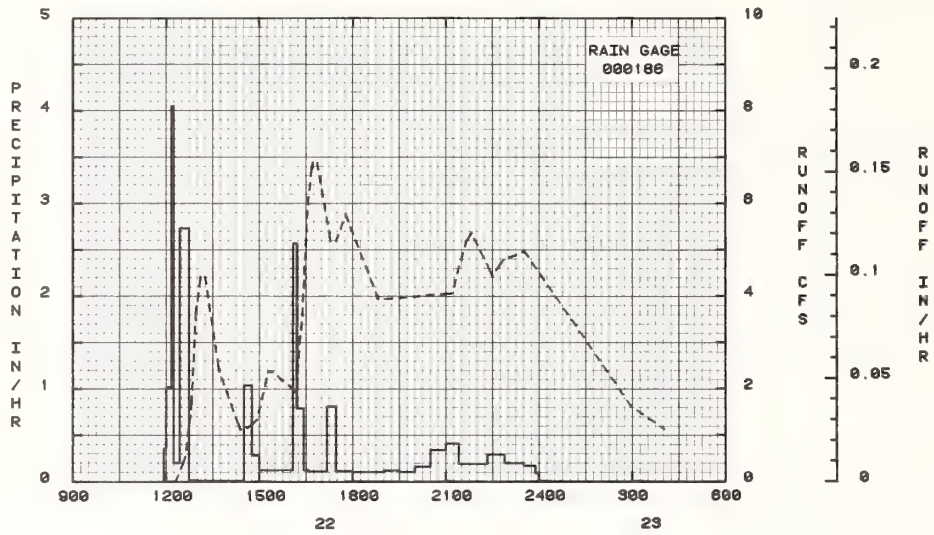
AREA: 44.26 acres

MONTHLY PRECIPITATION AND RUNOFF (inches)						CHICKASHA, OKLAHOMA				WATERSHED C-3									
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual					
1970	P	0.10	0.52	2.52	2.17	3.33	1.35	1.10	1.33	5.35	2.07	0.88	0.33	21.05					
	Q	0.002	0.0	0.006	0.027	0.968	0.001	0.0	0.0	1.236	0.040	0.0	0.0	2.280					
STA AV	P	0.81	1.09	2.03	3.07	3.33	1.95	2.14	2.98	3.89	1.58	1.07	0.72	24.71					
	Q	0.011	0.006	0.352	0.416	0.512	0.380	0.342	0.582	0.456	0.082	0.098	0.0	2.937					
ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																			
		Maximum Discharge		1 Hour		2 Hours		Maximum Volume for Selected Time Interval		6 Hours		12 Hours		1 Day		2 Days		8 Days	
		Date	Rate	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.
1970		5-14	0.428	5-14	0.399	5-14	0.621	5-14	0.956	5-22	1.046	5-22	1.235	5-22	1.236	5-22	1.236	5-22	1.236
MAXIMUMS FOR PERIOD OF RECORD																			
		5-14	0.428	5-14	0.399	5-14	0.621	8-29	1.029	8-29	1.093	5-22	1.235	4-12	1.333	8-21	1.768		
		1970		1970		1970		1966		1966		1970		1967		1966			

NOTES: Watershed conditions: 100% cropland, previously graded and smoothed for row irrigation. Entire watershed disked and moldboard plowed 8-10 inches deep in mid-Dec. 1969. Spring preplanting tillage consisted of disking, spring-tooth harrowing, incorporating fertilizer and herbicide. Entire watershed planted to cotton during early June. Tillage during growing season consisted of rotary hoeing and cultivating with sweep type cultivator as needed. Area irrigated four times, commencing July 7 and ending Sept. 3 with total applied about 10 inches. For general description and map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1965, USDA Misc. Pub. 1216, pp. 69.32-1 and 69.32-3. Monthly precipitation data obtained from two recording weighting type rain gages, No. 186 and Cotton Research Station gage. Precipitation and runoff records began September 1, 1965. STA AV based on 6 yr (1965-70) record period. For long-time precipitation records, see National Weather Service records at Chickasha, Okla.

1970	SELECTED RUNOFF EVENT						CHICKASHA, OKLAHOMA WATERSHED C-3					
ANTECEDENT CONDITIONS			RAINFALL				RUNOFF					
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.		
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)		
EVENT OF SEPTEMBER 22 - 23, 1970												
BG 000186			RG 930186									
9-22	0.0	0.0	9-22	1155	0.0	0.0	9-22	1218	0.0	0.0		
				1200	0.3600	0.03		1237	0.536	0.0019		
				1210	1.0200	0.20		1249	1.697	0.0070		
				1214	4.0500	0.47		1257	3.618	0.0149		
				1226	0.2000	0.51		1306	4.422	0.0282		
WATERSHED CONDITIONS:				1244	2.7333	1.33		1315	4.422	0.0433		
100% cultivation, continuous				1430	0.0113	1.35		1342	2.367	0.0775		
irrigated cotton. Cultivated				1445	1.0400	1.61		1423	1.117	0.1041		
July 23 and irrigated				1500	0.2800	1.68		1444	1.206	0.1132		
on Sept. 1.				1605	0.1200	1.81		1455	1.340	0.1184		
30 Day Antecedent Conditions:				1612	2.5714	2.11		1517	2.367	0.1336		
	Rainfall	Runoff		1625	0.7846	2.28		1526	2.367	0.1415		
Date	(inches)	(inches)		1635	0.1200	2.30		1611	1.921	0.1775		
08-18	0.61	0.000		1710	0.1029	2.36		1617	2.993	0.1831		
08-19	0.46	0.000		1727	0.8117	2.59		1622	3.440	0.1890		
08-21	0.26	0.000										
09-02	0.03	0.000										
09-07	0.12	0.000		1800	0.1091	2.65		1633	5.986	0.2083		
09-11	0.01	0.000		1900	0.1000	2.75		1642	6.879	0.2303		
09-13	0.43	0.000		1930	0.1200	2.81		1651	6.879	0.2531		
09-14	0.07	0.000		2000	0.1000	2.86		1717	5.182	0.3117		
09-16	0.53	0.000		2030	0.1600	2.94		1727	5.182	0.3312		
09-17	0.18	0.000										
09-22	0.28	0.000		2100	0.3400	3.11		1746	5.762	0.3699		
				2125	0.4080	3.28		1849	3.931	0.4839		
				2226	0.1855	3.45		2112	4.065	0.6972		
				2253	0.2909	3.61		2139	5.182	0.7437		
				2330	0.1946	3.73		2149	5.360	0.7635		
				2352	0.1636	3.79		2230	4.422	0.8384		
				2359	0.0857	3.80		2250	4.780	0.8726		
								2331	4.958	0.9471		
							9-23	258	1.608	1.2006		
								402	1.117	1.2331		

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.02241.



EVENT OF SEPTEMBER 22 - 23, 1970
CHICKASHA, OKLAHOMA WATERSHED C-3

CHICKASHA, OKLAHOMA WATERSHED C-4

LOCATION: Grady County, Oklahoma; NE 1/4, sec. 35, R. 7 W., T. 7 N., about 2-1/2 miles Southeast of Chickasha, Oklahoma; Washita River Basin.

AREA: 29.93 acres

MONTHLY PRECIPITATION AND RUNOFF (inches)														CHICKASHA, OKLAHOMA WATERSHED C-4	
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual	
1970	P	0.11	0.52	2.54	2.12	3.27	1.31	1.06	1.38	5.47	2.15	0.88	0.33	21.14	
	Q	0.004	0.0	0.001	0.008	1.070	0.0	0.033	0.0	0.948	0.015	0.0	0.0	2.079	
STA AV	P	0.82	1.09	2.10	3.02	3.39	1.97	2.16	3.04	3.88	1.59	1.05	0.74	24.85	
	Q	0.004	0.006	0.032	0.227	0.480	0.249	0.329	0.434	0.299	0.038	0.098	0.0	2.195	
ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS															
		Maximum Discharge				Maximum Volume for Selected Time Interval									
		Date	Rate	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.
1970		5-14	0.418	5-14	0.362	5-14	0.671	5-14	1.062	5-14	1.070	5-14	1.070	5-13	1.070
														5-7	1.070
MAXIMUMS FOR PERIOD OF RECORD															
		5-14	0.418	5-14	0.362	5-14	0.671	5-14	1.062	5-14	1.070	5-14	1.070	5-13	1.070
		1970		1970		1970		1970		1970		1970		1970	8-21
															1966

NOTES: Watershed conditions: 100% cropland, previously graded and smoothed for row irrigation. Entire watershed moldboard plowed 8-10 inches deep in mid-Dec. 1969. Spring preplanting tillage consisted of disking, spring-tooth harrowing, incorporating fertilizer and herbicides. Cotton was planted during early June 1970. Tillage during growing season consisted of rotary hoeing, followed by cultivating with sweep type cultivator as needed. Watershed was irrigated four times, commencing July 2 and ending Sept. 2, 1970, with total applied about 10 inches. For general description of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1965, USDA Misc. Pub. 1216, pp. 69.33-1 and 69.33-3. Monthly precipitation data obtained from Thiessen weighted rainfall values from two recording weighting type rain gages, Nos. 186 and 187. Precipitation and runoff records began September 1, 1965. STA AV based on 6 yr (1965-70) record period. For long-time precipitation records, see National Weather Service records at Chickasha, Okla.

1970 DAILY PRECIPITATION (inches)														CHICKASHA, OKLAHOMA WATERSHED C-4	
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec			
1	0.0	0.0	0.0	0.08	0.0	0.36	0.0	0.0	0.0	0.04	0.13	0.0			
2	0.0	0.0	0.0	0.0	0.0	0.02	0.0	0.0	0.03	0.0	0.0	0.0			
3	0.0	0.0	0.0	0.0	0.0	0.38	0.0	0.0	0.0	0.0	0.0	0.0			
4	0.0	0.0	0.0	0.24	0.0	0.14	0.0	0.0	0.0	0.0	0.0	0.0			
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.63	0.0	0.0			
6	0.0	0.0	1.01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
7	0.0	0.0	0.25	0.0	0.0	0.0	0.0	0.0	0.12	0.39	0.0	0.0			
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.54	0.0	0.0			
9	0.0	0.0	0.0	0.0	0.0	0.0	0.07	0.0	0.0	0.0	0.0	0.0			
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
11	0.0	0.0	0.0	0.0	0.0	0.02	0.05	0.0	0.0	0.0	0.0	0.0			
12	0.0	0.0	0.0	0.0	0.0	0.0	0.54	0.0	0.0	0.0	0.0	0.0			
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.43	0.0	0.75	0.0			
14	0.0	0.0	0.0	0.0	2.41	0.0	0.0	0.0	0.07	0.0	0.0	0.0			
15	0.0	0.0	0.0	0.0	0.10	0.0	0.0	0.0	0.0	0.01	0.0	0.25			
16	0.0	0.0	0.49	0.32	0.0	0.0	0.0	0.0	0.61	0.05	0.0	0.0			
17	0.11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.19	0.15	0.0	0.0			
18	0.0	0.0	0.01	0.0	0.0	0.0	0.0	0.60	0.0	0.0	0.0	0.0			
19	0.0	0.0	0.13	0.0	0.0	0.0	0.0	0.46	0.0	0.0	0.0	0.0			
20	0.0	0.0	0.0	0.0	0.0	0.39	0.27	0.0	0.0	0.0	0.0	0.01			
21	0.0	0.0	0.07	0.0	0.0	0.0	0.0	0.31	0.0	0.0	0.0	0.07			
22	0.0	0.11	0.0	0.0	0.0	0.0	0.0	0.01	3.98	0.31	0.0	0.0			
23	0.0	0.09	0.0	0.0	0.0	0.0	0.0	0.0	0.02	0.03	0.0	0.0			
24	0.0	0.06	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
26	0.0	0.0	0.0	0.26	0.0	0.0	0.0	0.0	0.02	0.0	0.0	0.0			
27	0.0	0.16	0.0	0.0	0.06	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
28	0.0	0.10	0.57	0.0	0.0	0.0	0.13	0.0	0.0	0.0	0.0	0.0			
29	0.0	0.0	0.0	0.28	0.68	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
30	0.0	0.0	0.0	0.94	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
31	0.0	0.0	0.01	0.02	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
TOTAL		0.11	0.52	2.54	2.12	3.27	1.31	1.06	1.38	5.47	2.15	0.88	0.33		
STA AV		0.82	1.09	2.10	3.02	3.39	1.97	2.16	3.04	3.88	1.59	1.05	0.74		

NOTES: Precipitation values obtained from two weighting recording type rain gages, Nos. 186 and 187. STA AV based on 6 yr (1965-70) record period.

1970 MEAN DAILY DISCHARGE (cfs) CHICKASHA, OKLAHOMA WATERSHED C-4												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6	0.0	0.0	0.001	0.0	0.0	0.0	0.037	0.0	0.0	0.0	0.0	0.0
7	0.0	0.0	0.001	0.0	0.0	0.0	0.003	0.0	0.0	0.0 T	0.0	0.0
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.019	0.0	0.0
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11	0.004	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	0.0	0.0	0.0	0.0	1.050	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.001	0.0	0.0	0.0	0.294	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0 T	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.865	0.0	0.0	0.0
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.326	0.0	0.0	0.0
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	0.0	0.0	0.0	0.010	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MEAN	0.0002	0.0	0.0	0.0003	0.0434	0.0	0.0013	0.0	0.0397	0.0006	0.0	0.0
INCHES	0.004	0.0	0.001	0.008	1.070	0.0	0.033	0.0	0.948	0.015	0.0	0.0
STA AV	0.004	0.006	0.032	0.227	0.480	0.249	0.329	0.434	0.299	0.038	0.098	0.0

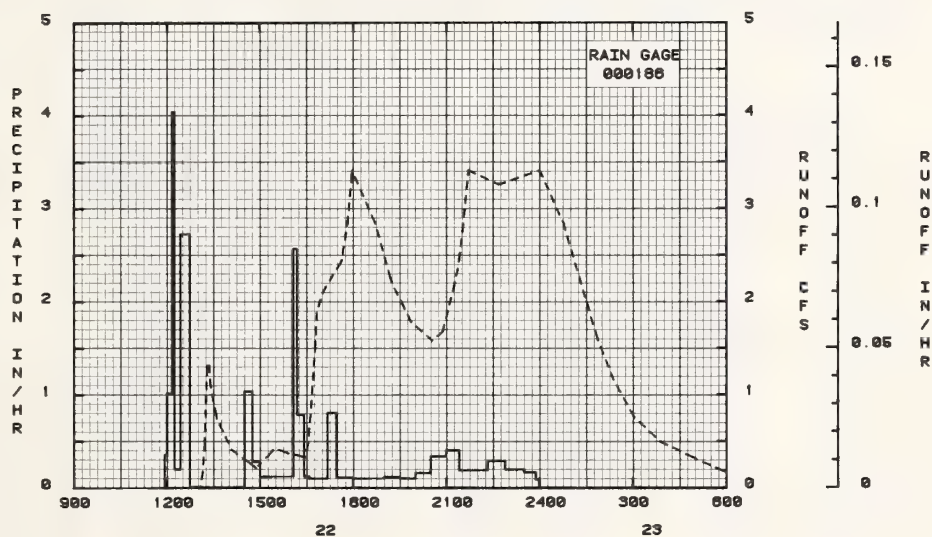
NOTES: To convert mean daily discharge in CPS to IN/DAY, multiply by 0.795244. STA AV based on 6 yr (1965-70) record period.

1970	SELECTED RUNOFF EVENT			CHICKASHA, OKLAHOMA WATERSHED C-4							
ANTECEDENT CONDITIONS			RAINFALL				RUNOFF				
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.	
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)	
EVENT OF SEPTEMBER 22 - 23, 1970											
RG 000186			RG 000186								
9-22	0.0	0.0	9-22	1155	0.0	0.0	9-22	1301	0.0	0.0	
				1200	0.3600	0.03		1305	0.023	0.0	
				1210	1.0200	0.20		1309	0.184	0.0002	
				1214	4.0500	0.47		1313	0.538	0.0010	
				1226	0.2000	0.51		1317	1.236	0.0030	
WATERSHED CONDITIONS:				1244	2.7333	1.33		1319	1.318	0.0045	
100% cultivation, continuous				1430	0.0113	1.35		1321	1.318	0.0059	
irrigated cotton. Cultivated				1445	1.0400	1.61		1325	1.082	0.0085	
July 8 and irrigated on Sept. 1.				1500	0.2800	1.68		1336	0.751	0.0141	
				1605	0.1200	1.81		1405	0.407	0.0234	
30 Day Antecedent Conditions:				1612	2.5714	2.11		1432	0.298	0.0287	
Date	Rainfall	Runoff		1625	0.7846	2.28		1453	0.209	0.0317	
	(inches)	(inches)		1635	0.1200	2.30		1456	0.236	0.0320	
08-18	0.60	0.000		1710	0.1029	2.36		1502	0.266	0.0328	
08-19	0.46	0.000		1727	0.8117	2.59		1525	0.407	0.0371	
08-21	0.31	0.000									
08-22	0.01	0.000									
09-02	0.03	0.000		1800	0.1091	2.65		1536	0.407	0.0396	
09-07	0.12	0.000		1900	0.1000	2.75		1555	0.368	0.0437	
09-13	0.44	0.000		1930	0.1200	2.81		1628	0.332	0.0501	
09-14	0.08	0.000		2000	0.1000	2.86		1633	0.492	0.0512	
09-16	0.61	0.000		2030	0.1600	2.94		1640	0.940	0.0540	
09-17	0.20	0.000									
09-22	0.28	0.000		2100	0.3400	3.11		1647	1.584	0.0589	
				2125	0.4080	3.28		1650	1.881	0.0618	
				2220	0.1855	3.45		1701	2.097	0.0739	
				2253	0.2909	3.61		1738	2.449	0.1204	
				2330	0.1946	3.73		1749	2.837	0.1365	
				2352	0.1636	3.79		1758	3.409	0.1519	
				2359	0.0857	3.80		1843	2.837	0.2296	
								1914	2.211	0.2728	
								1934	1.987	0.2962	
								1952	1.778	0.3147	
								2033	1.584	0.3528	
								2053	1.679	0.3710	
								2117	2.211	0.3967	
								2125	2.449	0.4070	
								2133	2.837	0.4186	

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.03314. Antecedent precipitation amounts are from Thiessen weighted rainfall using rain gages 186 and 187.

1970 SELECTED RUNOFF EVENT			CHICKASHA, OKLAHOMA WATERSHED C-4							
ANTECEDENT CONDITIONS			RAINFALL				RUNOFF			
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)
EVENT OF SEPTEMBER 22 - 23, 1970 (CONTINUED)										
				9-22				2143	3.409	0.4360
								2240	3.260	0.5410
								2400	3.409	0.6888
				9-23				46	2.837	0.7681
								153	1.584	0.8500
								223	1.157	0.8727
								303	0.751	0.8937
								354	0.492	0.9113
								503	0.298	0.9263

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.03314. Antecedent precipitation amounts are from Thiessen weighted rainfall using rain gages 186 and 187.



EVENT OF SEPTEMBER 22 - 23, 1970
CHICKASHA, OKLAHOMA WATERSHED C-4

CHICKASHA, OKLAHOMA WATERSHED C-5

LOCATION: Grady County, Oklahoma; SW 1/4, sec. 35, R. 7 W., T. 7 N., about 3 miles Southeast of Chickasha, Oklahoma; Washita River Basin.

AREA: 12.80 acres

MONTHLY PRECIPITATION AND RUNOFF (inches)														CHICKASHA, OKLAHOMA WATERSHED C-5	
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual	
1970	P	0.10	0.49	2.51	2.09	3.16	1.18	0.96	1.36	5.40	2.13	0.83	0.33	20.54	
	Q	0.0	0.0	0.0	0.0	0.005	0.0	0.0	0.0	0.706	0.0	0.0	0.0	0.711	
STA AV	P	0.81	1.06	2.06	2.95	3.27	2.01	1.90	3.89	3.81	1.56	1.01	0.72	25.05	
	Q	0.0	0.0	0.078	0.250	0.107	0.049	0.004	0.067	0.122	0.002	0.012	0.0	0.691	
ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS															
		Maximum Discharge		1 Hour		2 Hours		Maximum Volume for Selected Time Interval		6 Hours		12 Hours		1 Day	
		Date	Rate	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.
1970		9-22	0.112	9-22	0.102	9-22	0.195	9-22	0.425	9-22	0.686	9-22	0.706	9-21	0.706
MAXIMUMS FOR PERIOD OF RECORD															
		4-12	0.280	4-12	0.250	4-12	0.409	4-12	0.673	4-12	0.775	4-12	0.812	4-12	0.935
		1967		1967		1967		1967		1967		1967		1967	
														4- 9	1.180

NOTES: Watershed conditions: 100% cropland, planted to wheat in the fall of 1969 and harvested for grain in June 1970. Watershed was moldboard plowed soon after harvest and remained in rough condition until about mid-Aug. 1970 when watershed was disked, spring-tooth harrowed, in preparation for seeding to wheat. Watershed was freshly spring-tooth and spike-tooth harrowed just prior to seeding to wheat in mid-Oct. 1970. For general description of map, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, USDA Misc. Pub. 1216, p. 69.34-1. Maps - revised composite, p. 69.7-21; topography, p. 69.34-3 of foregoing reference. Monthly precipitation data obtained from Thiessen weighted rainfall values from two weighting recording type rain gages, Nos. 185 and 187. Precipitation and runoff records began May 1, 1965. STA AV based on 6 yr (1965-70) record period. For long-time precipitation records, see National Weather Service records at Chickasha, Okla.

1970 DAILY PRECIPITATION (inches)														CHICKASHA, OKLAHOMA WATERSHED C-5	
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec			
1	0.0	0.0	0.0	0.09	0.0	0.34	0.0	0.0	0.0	0.04	0.12	0.0			
2	0.0	0.0	0.0	0.0	0.0	0.02	0.0	0.0	0.03	0.0	0.0	0.0			
3	0.0	0.0	0.0	0.0	0.0	0.35	0.0	0.0	0.0	0.0	0.0	0.0			
4	0.0	0.0	0.0	0.23	0.0	0.14	0.0	0.0	0.0	0.0	0.0	0.0			
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.62	0.0	0.0			
6	0.0	0.0	1.01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
7	0.0	0.0	0.25	0.0	0.0	0.0	0.0	0.0	0.11	0.39	0.0	0.0			
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.54	0.0	0.0			
9	0.0	0.0	0.0	0.0	0.0	0.0	0.04	0.0	0.0	0.0	0.0	0.0			
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
11	0.0	0.0	0.0	0.0	0.0	0.02	0.05	0.0	0.0	0.0	0.0	0.0			
12	0.0	0.0	0.0	0.0	0.0	0.0	0.47	0.0	0.0	0.0	0.0	0.0			
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.43	0.0	0.71	0.0			
14	0.0	0.0	0.0	0.0	2.32	0.0	0.0	0.0	0.06	0.0	0.0	0.0			
15	0.0	0.0	0.0	0.0	0.09	0.0	0.0	0.0	0.0	0.01	0.0	0.24			
16	0.0	0.0	0.49	0.31	0.0	0.0	0.0	0.0	0.63	0.05	0.0	0.0			
17	0.10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.19	0.15	0.0	0.0			
18	0.0	0.0	0.01	0.0	0.0	0.0	0.0	0.57	0.0	0.0	0.0	0.0			
19	0.0	0.0	0.13	0.0	0.0	0.0	0.0	0.47	0.0	0.0	0.0	0.0			
20	0.0	0.0	0.0	0.0	0.0	0.31	0.27	0.0	0.0	0.0	0.0	0.01			
21	0.0	0.0	0.06	0.0	0.0	0.0	0.0	0.31	0.0	0.0	0.0	0.08			
22	0.0	0.10	0.0	0.0	0.0	0.0	0.0	0.01	3.90	0.30	0.0	0.0			
23	0.0	0.08	0.0	0.0	0.0	0.0	0.0	0.0	0.03	0.03	0.0	0.0			
24	0.0	0.05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
26	0.0	0.0	0.0	0.26	0.0	0.0	0.0	0.0	0.02	0.0	0.0	0.0			
27	0.0	0.16	0.0	0.0	0.05	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
28	0.0	0.10	0.55	0.0	0.0	0.0	0.13	0.0	0.0	0.0	0.0	0.0			
29	0.0	0.0	0.0	0.28	0.68	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
30	0.0	0.0	0.0	0.92	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
31	0.0	0.0	0.01	0.02	0.02	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
TOTAL	0.10	0.49	2.51	2.09	3.16	1.18	0.96	1.36	5.40	2.13	0.83	0.33			
STA AV	0.81	1.06	2.06	2.95	3.27	2.01	1.90	3.89	3.81	1.56	1.01	0.72			

NOTES: Precipitation values obtained from two weighting recording type rain gages, Nos. 185 and 187. STA AV based on 6 yr (1965-70) record period.

1970 MEAN DAILY DISCHARGE (cfs) CHICKASAW, OKLAHOMA WATERSHED C-5												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	0.0	0.0	0.0	0.0	0.002	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0 T	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.321	0.0	0.0	0.0
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.058	0.0	0.0	0.0
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MEAN	0.0	0.0	0.0	0.0	0.0001	0.0	0.0	0.0	0.0127	0.0	0.0	0.0
INCHES	0.0	0.0	0.0	0.0	0.005	0.0	0.0	0.0	0.706	0.0	0.0	0.0
STA AV	0.0	0.0	0.078	0.250	0.107	0.049	0.004	0.067	0.122	0.002	0.012	0.0

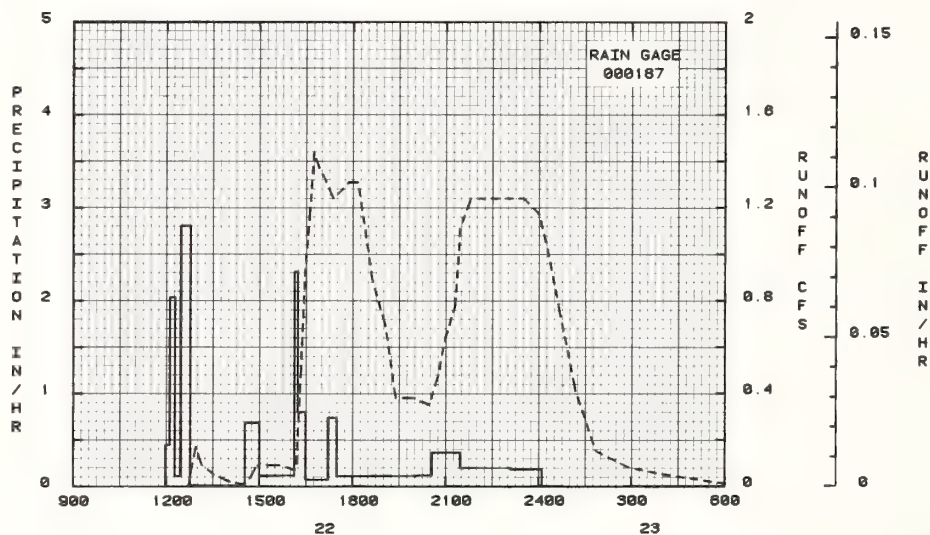
NOTES: To convert mean daily discharge in CFS to IN/DAY, multiply by 1.859504. STA AV based on 6 yr (1965-70) record period.

1970 SELECTED RUNOFF EVENT CHICKASAW, OKLAHOMA WATERSHED C-5												
ANTECEDENT CONDITIONS			RAINFALL				RUNOFF					
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.		
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)		
EVENT OF SEPTEMBER 22 - 23, 1970												
RG 000187												
9-22	0.0	0.0	9-22	1158	0.0	0.0	9-22	1241	0.0	0.0		
				1206	0.4500	0.06		1243	0.011	0.0		
				1216	2.0400	0.40		1244	0.022	0.0		
				1227	0.1091	0.42		1246	0.045	0.0001		
				1246	2.8105	1.31		1247	0.062	0.0002		
WATERSHED CONDITIONS:												
100% cultivation, continuous												
dry land wheat. Harvested												
June 7, chiseled June 27.												
Disked Aug. 20, Sept. 11												
and Sept. 21.												
				1432	0.0113	1.33		1250	0.100	0.0005		
				1500	0.6857	1.65		1257	0.174	0.0017		
				1607	0.1164	1.78		1304	0.121	0.0030		
				1614	2.3142	2.05		1309	0.089	0.0037		
				1629	0.8000	2.25		1332	0.045	0.0057		
30 Day Antecedent Conditions:												
				1712	0.0698	2.30		1342	0.039	0.0062		
				1729	0.7412	2.51		1402	0.018	0.0069		
				1834	0.1108	2.63		1422	0.011	0.0073		
				2004	0.1133	2.80		1433	0.011	0.0075		
				2034	0.1200	2.86		1443	0.039	0.0078		
				2128	0.3667	3.19		1452	0.078	0.0085		
				2306	0.1959	3.51		1456	0.089	0.0089		
			9-23	6	0.1800	3.69		1501	0.100	0.0095		
								1517	0.089	0.0114		
								1538	0.089	0.0138		
								1608	0.070	0.0169		
								1611	0.100	0.0172		
								1616	0.318	0.0186		
								1620	0.517	0.0207		
								1628	0.937	0.0282		
								1636	1.174	0.0391		
								1644	1.445	0.0526		
								1654	1.374	0.0709		
								1708	1.305	0.0952		
								1721	1.235	0.1164		
								1751	1.305	0.1657		
								1809	1.305	0.1961		
								1838	0.883	0.2372		
								1903	0.685	0.2624		
								1923	0.378	0.2762		

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.07748. Antecedent precipitation amounts are from Thiessen weighted rainfall using rain gages 185 and 187.

1970	SELECTED RUNOFF EVENT					CHICKASHA, OKLAHOMA		WATERSHED C-5		
ANTECEDENT CONDITIONS			RAINFALL				RUNOFF			
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)
EVENT OF SEPTEMBER 22 - 23, 1970 (CONTINUED)										
							9-22	1959	0.378	0.2937
								2028	0.347	0.3073
								2045	0.480	0.3164
								2059	0.641	0.3264
								2118	0.780	0.3438
								2127	1.112	0.3550
								2147	1.239	0.3852
								2330	1.239	0.5502
								2400	1.174	0.5969
							9-23	13	1.051	0.6154
								42	0.732	0.6489
								111	0.410	0.6702
								151	0.155	0.6848
								254	0.078	0.6943
								401	0.045	0.6996

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.07748. Antecedent precipitation amounts are from Thiessen weighted rainfall using rain gages 185 and 187.



EVENT OF SEPTEMBER 22 - 23, 1970
CHICKASHA, OKLAHOMA WATERSHED C-5

CHICKASHA, OKLAHOMA WATERSHED C-6

LOCATION: Grady County, Oklahoma; SW 1/4, sec. 35, R. 7 W., T. 7 N., about 3 miles Southeast of Chickasha, Oklahoma; Washita River Basin.

AREA: 13.00 acres

MONTHLY PRECIPITATION AND RUNOFF (inches)							CHICKASHA, OKLAHOMA WATERSHED C-6												
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual					
1970	P	0.10	0.49	2.50	2.09	3.14	1.18	0.96	1.37	5.42	2.13	0.83	0.33	20.54					
	Q	0.016	0.0	0.0	0.0	0.016	0.0	0.0	0.0	0.888	0.0	0.0	0.0	0.920					
STA AV	P	0.81	1.05	2.04	2.96	3.27	2.00	1.89	3.89	3.80	1.56	1.01	0.72	25.01					
	Q	0.003	0.014	0.139	0.232	0.141	0.068	0.006	0.145	0.166	0.013	0.037	0.0	0.965					
ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																			
		Maximum Discharge		1 Hour		2 Hours		Maximum Volume for Selected Time Interval		6 Hours		12 Hours		1 Day		2 Days		8 Days	
		Date	Rate	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.
1970		9-22	0.284	9-22	0.180	9-22	0.276	9-22	0.514	9-22	0.830	9-22	0.888	9-22	0.888	9-22	0.888	9-22	0.888
MAXIMUMS FOR PERIOD OF RECORD																			
		8-28	0.305	4-12	0.259	4-12	0.398	4-12	0.634	9-22	0.830	9-22	0.888	4-12	0.895	4-9	1.050		
		1965		1967		1967		1967		1970		1970		1967		1967			

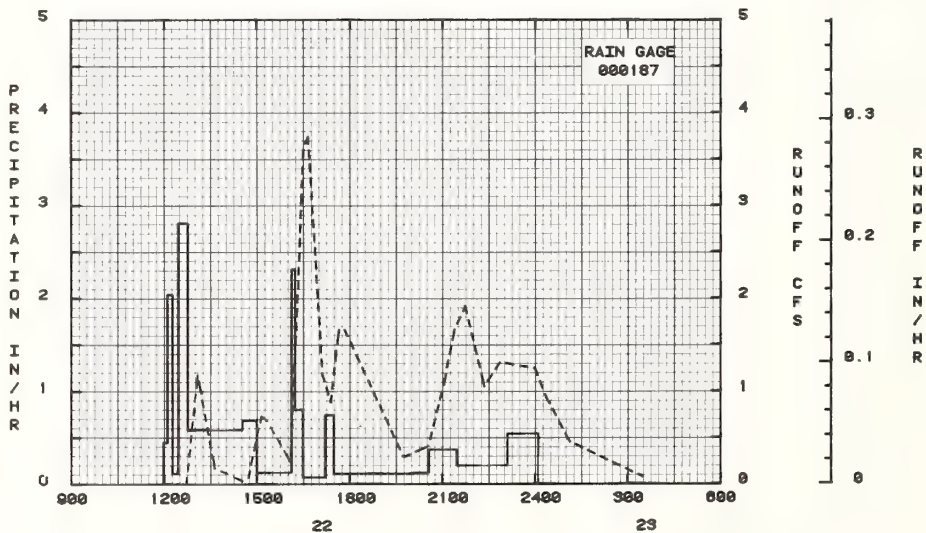
NOTES: Watershed conditions: 100% cropland, planted to wheat in fall of 1969 and harvested for grain in June 1970. Watershed was moldboard plowed soon after harvest and remained in rough condition until about mid-Aug. 1970, when watershed was disked and spring-tooth harrowed, in preparation for seeding to wheat. Watershed was freshly spring-tooth and spike-tooth harrowed just prior to seeding wheat in mid-Oct. 1970. For general description of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1965, USDA Misc. Pub. 1216, p. 69.35-1. Maps - revised composite, p. 69.7-21; topography, p. 69.34-3 of foregoing reference. Monthly precipitation data obtained from Thiessen weighted rainfall values from two weighting recording type rain gages, Nos. 185 and 187. Precipitation and runoff records began May 1, 1965. STA AV based on 6 yr (1965-70) record period. For long-time precipitation records, see National Weather Service records at Chickasha, Okla.

1970 DAILY PRECIPITATION (inches)													CHICKASHA, OKLAHOMA WATERSHED C-6	
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
1	0.0	0.0	0.0	0.09	0.0	0.34	0.0	0.0	0.0	0.04	0.12	0.0		
2	0.0	0.0	0.0	0.0	0.0	0.02	0.0	0.0	0.03	0.0	0.0	0.0		
3	0.0	0.0	0.0	0.0	0.0	0.35	0.0	0.0	0.0	0.0	0.0	0.0		
4	0.0	0.0	0.0	0.23	0.0	0.14	0.0	0.0	0.0	0.0	0.0	0.0		
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.62	0.0	0.0		
6	0.0	0.0	1.01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
7	0.0	0.0	0.24	0.0	0.0	0.0	0.0	0.0	0.11	0.39	0.0	0.0		
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.54	0.0	0.0		
9	0.0	0.0	0.0	0.0	0.0	0.0	0.04	0.0	0.0	0.0	0.0	0.0		
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
11	0.0	0.0	0.0	0.0	0.0	0.02	0.05	0.0	0.0	0.0	0.0	0.0		
12	0.0	0.0	0.0	0.0	0.0	0.0	0.47	0.0	0.0	0.0	0.0	0.0		
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.43	0.0	0.71	0.0		
14	0.0	0.0	0.0	0.0	2.30	0.0	0.0	0.0	0.06	0.0	0.0	0.0		
15	0.0	0.0	0.0	0.0	0.09	0.0	0.0	0.0	0.0	0.01	0.0	0.24		
16	0.0	0.0	0.49	0.31	0.0	0.0	0.0	0.0	0.64	0.05	0.0	0.0		
17	0.10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.19	0.15	0.0	0.0		
18	0.0	0.0	0.01	0.0	0.0	0.0	0.0	0.57	0.0	0.0	0.0	0.0		
19	0.0	0.0	0.13	0.0	0.0	0.0	0.0	0.48	0.0	0.0	0.0	0.0		
20	0.0	0.0	0.0	0.0	0.0	0.31	0.27	0.0	0.0	0.0	0.0	0.01		
21	0.0	0.0	0.06	0.0	0.0	0.0	0.0	0.31	0.0	0.0	0.0	0.08		
22	0.0	0.10	0.0	0.0	0.0	0.0	0.0	0.01	3.90	0.30	0.0	0.0		
23	0.0	0.08	0.0	0.0	0.0	0.0	0.0	0.0	0.04	0.03	0.0	0.0		
24	0.0	0.05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
26	0.0	0.0	0.0	0.26	0.0	0.0	0.0	0.0	0.02	0.0	0.0	0.0		
27	0.0	0.16	0.0	0.0	0.05	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
28	0.0	0.10	0.55	0.0	0.0	0.0	0.13	0.0	0.0	0.0	0.0	0.0		
29	0.0	0.0	0.0	0.28	0.68	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
30	0.0	0.0	0.0	0.92	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
31	0.0	0.0	0.01	0.02	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
TOTAL	0.10	0.49	2.50	2.09	3.14	1.18	0.96	1.37	5.42	2.13	0.83	0.33		
STA AV	0.81	1.05	2.04	2.96	3.27	2.00	1.89	3.89	3.80	1.56	1.01	0.72		

NOTES: Precipitation values obtained from two weighting recording type rain gages, Nos. 185 and 187. STA AV based 6 yr (1965-70) record period.

1970 SELECTED RUNOFF EVENT			CHICKASHA, OKLAHOMA WATERSHED C-6							
ANTECEDENT CONDITIONS			RAINFALL				RUNOFF			
Date Mo-Day	Rainfall (inches)	Runoff (inches)	Date Mo-Day	Time of Day	Intensity (in/hr)	Acc. (inches)	Date Mo-Day	Time of Day	Rate (cfs)	Acc. (inches)
EVENT OF SEPTEMBER 22 - 23, 1970										
RG 000187			RG 000187							
9-22	0.0	0.0	9-22	1158	0.0	0.0	9-22	1243	0.0	0.0
				1206	0.4500	0.06		1305	1.180	0.0165
				1216	2.0400	0.40		1309	1.049	0.0222
				1227	0.1091	0.42		1338	0.170	0.0447
				1246	2.8105	1.31		1432	0.026	0.0514
WATERSHED CONDITIONS:										
100% cultivation, continuous				1432	0.0113	1.33		1444	0.066	0.0521
dry land wheat. Harvested				1500	0.6857	1.65		1458	0.446	0.0567
June 7, chiseled June 27.				1607	0.1164	1.78		1509	0.734	0.0650
Disked Aug. 20, Sept. 11				1614	2.3142	2.05		1520	0.682	0.0749
and Sept. 21.				1629	0.8000	2.25		1605	0.236	0.1011
30 Day Antecedent Conditions:				1712	0.0698	2.30		1623	2.569	0.1333
	Rainfall	Runoff		1729	0.7412	2.51		1626	3.120	0.1435
Date	(inches)	(inches)		1834	0.1108	2.63		1630	3.605	0.1615
08-18	0.57	0.000		2004	0.1133	2.80		1639	3.736	0.2031
08-19	0.48	0.000		2034	0.1200	2.86		1707	1.180	0.2902
08-21	0.31	0.000								
08-22	0.01	0.000		2128	0.3667	3.19		1723	0.878	0.3114
09-03	0.03	0.000		2306	0.1959	3.51		1734	1.442	0.3277
09-07	0.10	0.000	9-23	6	0.5400	4.05		1739	1.665	0.3374
09-13	0.43	0.000						1750	1.665	0.3607
09-14	0.06	0.000						1944	0.288	0.5021
09-16	0.64	0.000								
09-17	0.19	0.000						2033	0.406	0.5237
09-22	0.20	0.000						2104	1.114	0.5539
								2123	1.665	0.5874
								2144	1.914	0.6349
								2221	1.049	0.7046
								2251	1.311	0.7496
								2400	1.245	0.8620
							9-23	21	0.931	0.8908
								107	0.446	0.9310
								329	0.066	0.9773

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.07629. Antecedent precipitation amounts are from Thiessen weighted rainfall using rain gages 185 and 187.



EVENT OF SEPTEMBER 22 - 23, 1970

CHICKASHA, OKLAHOMA WATERSHED C-6

CHICKASHA, OKLAHOMA WATERSHED C-7

LOCATION: Grady County, Oklahoma; SW 1/4, sec. 35, R. 7 W., T. 7 N., about 3 miles Southeast of Chickasha, Oklahoma; Washita River Basin.

AREA: 26.52 acres

MONTHLY PRECIPITATION AND RUNOFF (inches)														CHICKASHA, OKLAHOMA WATERSHED C-7	
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual	
1970	P	0.09	0.47	2.51	2.07	3.11	1.16	0.92	1.37	5.41	2.10	0.83	0.32	20.36	
	Q	0.0	0.0	0.0	0.091	0.377	0.0	0.0	0.0	0.586	0.005	0.0	0.0	0.969	
STA AV	P	0.81	1.03	2.02	2.93	3.24	1.99	1.88	3.86	3.79	1.54	1.01	0.71	24.82	
	Q	0.0	0.016	0.015	0.393	0.209	0.211	0.149	0.431	0.201	0.082	0.041	0.0	1.749	
ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS															
		Maximum Discharge		1 Hour		2 Hours		Maximum Volume for Selected Time Interval				1 Day		2 Days	
		Date	Rate	Date	Vol.	Date	Vol.	6 Hours	12 Hours	Date	Vol.	Date	Vol.	Date	Vol.
1970		5-14	0.411	5-14	0.280	5-14	0.334	5-14	0.373	9-22	0.493	9-22	0.586	9-22	0.586
MAXIMUMS FOR PERIOD OF RECORD															
		4-12	0.957	4-12	0.637	4-12	0.824	4-12	0.944	4-12	0.969	4-12	1.050	4-10	1.228
		1967		1967		1967		1967		1967		1960		1967	1967

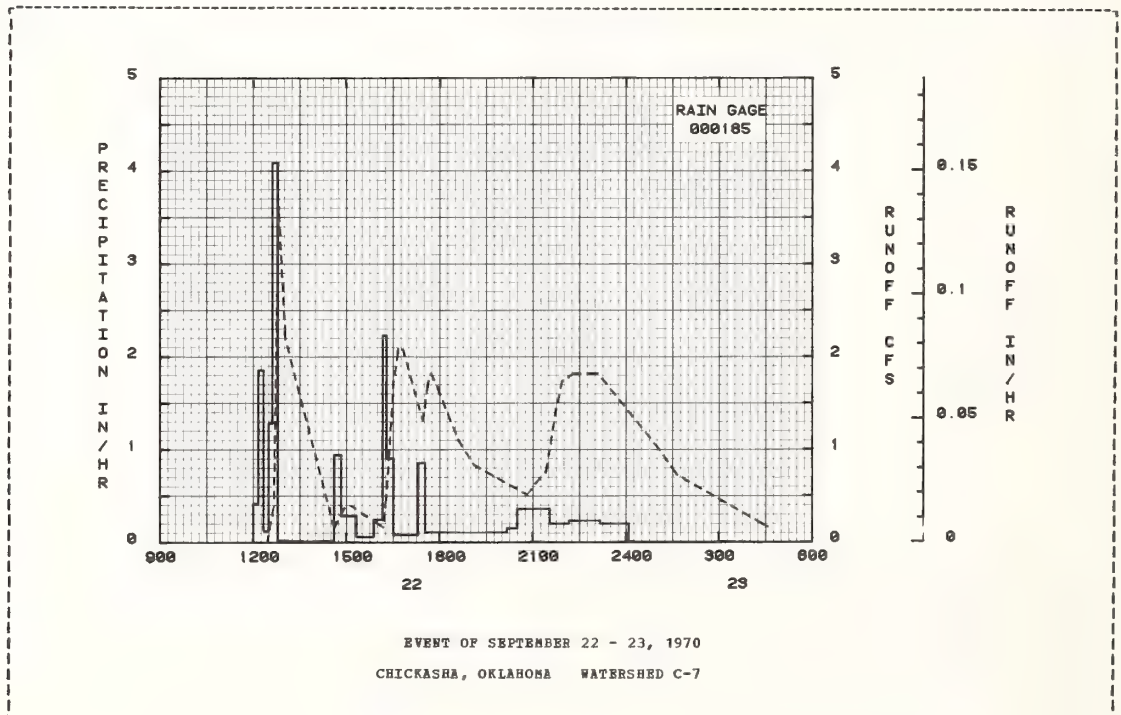
NOTES: Watershed conditions: 100% cropland. North portion was planted to alfalfa in fall of 1969. South portion of watershed was planted to grain and forage sorghums and soy beans. For description and map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United, USDA Misc. Pub. 1216, pp. 69.36-1 and 69.36-3. Monthly precipitation data from Thiessen weighted rainfall value from two recording weighting type rain gages, Nos. 185 and 187. Precipitation and runoff records began May 1, 1965. STA AV based on 6 yr (1965-70) record period. For long-time precipitation records, see National Weather Service records at Chickasha, Okla.

1970 DAILY PRECIPITATION (inches)/														CHICKASHA, OKLAHOMA WATERSHED C-7	
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec			
1	0.0	0.0	0.0	0.08	0.0	0.33	0.0	0.0	0.0	0.04	0.13	0.0			
2	0.0	0.0	0.0	0.0	0.0	0.02	0.0	0.0	0.02	0.0	0.0	0.0			
3	0.0	0.0	0.0	0.0	0.0	0.35	0.0	0.0	0.0	0.0	0.0	0.0			
4	0.0	0.0	0.0	0.24	0.0	0.15	0.0	0.0	0.0	0.0	0.0	0.0			
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.61	0.0			
6	0.0	0.0	1.02	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
7	0.0	0.0	0.24	0.0	0.0	0.0	0.0	0.0	0.10	0.39	0.0	0.0			
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.53	0.0	0.0			
9	0.0	0.0	0.0	0.0	0.0	0.0	0.03	0.0	0.0	0.0	0.0	0.0			
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
11	0.0	0.0	0.0	0.0	0.0	0.02	0.05	0.0	0.0	0.0	0.0	0.0			
12	0.0	0.0	0.0	0.0	0.0	0.0	0.46	0.0	0.0	0.0	0.0	0.0			
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.43	0.0	0.70	0.0			
14	0.0	0.0	0.0	0.0	2.27	0.0	0.0	0.0	0.06	0.0	0.0	0.0			
15	0.0	0.0	0.0	0.0	0.09	0.0	0.0	0.0	0.0	0.01	0.0	0.23			
16	0.0	0.0	0.49	0.31	0.0	0.0	0.0	0.0	0.65	0.06	0.0	0.0			
17	0.09	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.19	0.14	0.0	0.0			
18	0.0	0.0	0.01	0.0	0.0	0.0	0.0	0.56	0.0	0.0	0.0	0.0			
19	0.0	0.0	0.13	0.0	0.0	0.0	0.0	0.48	0.0	0.0	0.0	0.0			
20	0.0	0.0	0.0	0.0	0.0	0.29	0.26	0.0	0.0	0.0	0.0	0.0			
21	0.0	0.0	0.06	0.0	0.0	0.0	0.0	0.31	0.0	0.0	0.0	0.08			
22	0.0	0.09	0.0	0.0	0.0	0.0	0.0	0.02	3.90	0.30	0.0	0.0			
23	0.0	0.08	0.0	0.0	0.0	0.0	0.0	0.0	0.04	0.02	0.0	0.0			
24	0.0	0.05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
26	0.0	0.0	0.0	0.25	0.0	0.0	0.0	0.0	0.02	0.0	0.0	0.0			
27	0.0	0.15	0.0	0.0	0.05	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
28	0.0	0.10	0.55	0.0	0.0	0.0	0.12	0.0	0.0	0.0	0.0	0.0			
29	0.0	0.0	0.0	0.28	0.67	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
30	0.0	0.0	0.0	0.91	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
31	0.0	0.0	0.01	0.03	0.03	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
TOTAL	0.09	0.47	2.51	2.07	3.11	1.16	0.92	1.37	5.41	2.10	0.83	0.32			
STA AV	0.81	1.03	2.02	2.93	3.24	1.99	1.88	3.86	3.79	1.54	1.01	0.71			

NOTES: Precipitation values obtained from two recording weighting type rain gages, Nos. 185 and 187. STA AV based 6 yr (1965-70) record period.

1970 SELECTED RUNOFF EVENT			CHICKASHA, OKLAHOMA WATERSHED C-7							
ANTECEDENT CONDITIONS			RAINFALL				RUNOFF			
Date Mo-Day	Rainfall (inches)	Runoff (inches)	Date Mo-Day	Time of Day	Intensity (in/hr)	Acc. (inches)	Date Mo-Day	Time of Day	Rate (cfs)	Acc. (inches)
EVENT OF SEPTEMBER 22 - 23, 1970										
RG 000185			RG 000185							
9-22	0.0	0.0	9-22	1200	0.0	0.0	9-22	1227	0.0	0.0
				1210	0.4200	0.07		1240	0.401	0.0016
				1220	1.8600	0.38		1245	2.378	0.0061
				1230	0.1200	0.40		1249	3.607	0.0135
				1237	1.2857	0.55		1302	2.191	0.0368
WATERSHED CONDITIONS:										
100 % cultivation, north			1248 4.0909 1.30 1436 0.160 0.1057							
portion of field in alfalfa,			1436 0.0167 1.33 1456 0.374 0.1091							
last harvested July 14.			1450 0.9429 1.55 1507 0.401 0.1117							
South portion of field			1520 0.2800 1.69 1611 0.160 0.1229							
in cotton, soybeans and			1553 0.0545 1.72 1617 0.508 0.1242							
grain sorghum.										
30 Day Antecedent Conditions:			1610 0.2471 1.79 1623 0.989 0.1270							
Rainfall Runoff			1617 2.2285 2.05 1631 1.737 0.1338							
Date	(inches)	(inches)	1631 0.9000 2.26 1640 2.084 0.1444							
08-18	0.56	0.000	1718 0.0766 2.32 1649 2.084 0.1563							
08-19	0.48	0.000	1732 0.8571 2.52 1727 1.309 0.1965							
08-21	0.31	0.000	2010 0.1063 2.80 1738 1.737 0.2069							
08-22	0.02	0.000	2030 0.1500 2.85 1743 1.817 0.2124							
09-02	0.02	0.000	2133 0.3619 3.23 1756 1.657 0.2264							
09-07	0.10	0.000	2210 0.1946 3.35 1836 1.096 0.2608							
09-13	0.43	0.000	2310 0.2300 3.58 1906 0.828 0.2788							
09-14	0.06	0.000								
09-16	0.64	0.000	9-23	5	0.1964	3.76	2049	0.508	0.3217	
09-17	0.19	0.000	2106 0.641 0.3278							
09-22	0.17	0.000	2126 0.775 0.3366							
							2145	1.443	0.3499	
							2157	1.737	0.3617	
							2218	1.817	0.3848	
							2305	1.817	0.4382	
							105	0.989	0.5432	
							139	0.721	0.5614	
							434	0.160	0.6095	

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.03740. Antecedent precipitation amounts are from Thiessen weighted rainfall using rain gages 185 and 187.



CHICKASHA, OKLAHOMA WATERSHED C-8

LOCATION: Grady County, Oklahoma; SW 1/4, sec. 35, E. 7 W., T. 7 N., about 3-1/2 miles Southeast of Chickasha, Oklahoma; Washita River Basin.

AREA: 27.28 acres

MONTHLY PRECIPITATION AND RUNOFF (inches)														CHICKASHA, OKLAHOMA WATERSHED C-8															
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual															
1970	P	0.09	0.48	2.50	2.06	2.87	1.12	0.95	1.37	5.16	2.28	0.88	0.37	20.13															
	Q	0.0	0.0	0.0	0.0	0.002	0.0	0.6	0.0	0.115	0.0	0.0	0.0	0.117															
STA AV	P	0.81	1.06	2.04	2.74	3.28	1.99	1.92	3.81	3.72	1.58	1.02	0.73	24.69															
	Q	0.0	0.0	0.013	0.090	0.029	0.015	0.078	0.217	0.148	0.001	0.0	0.0	0.592															
ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																													
		Maximum Discharge				Maximum Volume for Selected Time Interval																							
		Date	Rate	1 Hour	2 Hours	6 Hours						12 Hours						1 Day		2 Days		8 Days							
		Date	Rate	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.								
1970		9-22	0.038	9-22	0.024	9-22	0.038	9-22	0.059	9-22	0.110	9-22	0.115	9-22	0.115	9-22	0.115	9-22	0.115	9-22	0.115								
MAXIMUMS FOR PERIOD OF RECORD																													
		9-19	0.257	9-19	0.190	9-19	0.249	8-29	0.374	8-29	0.430	8-29	0.436	9-19	0.610	8-21	0.678												
		1965		1965		1965		1966		1966		1966		1965		1966													

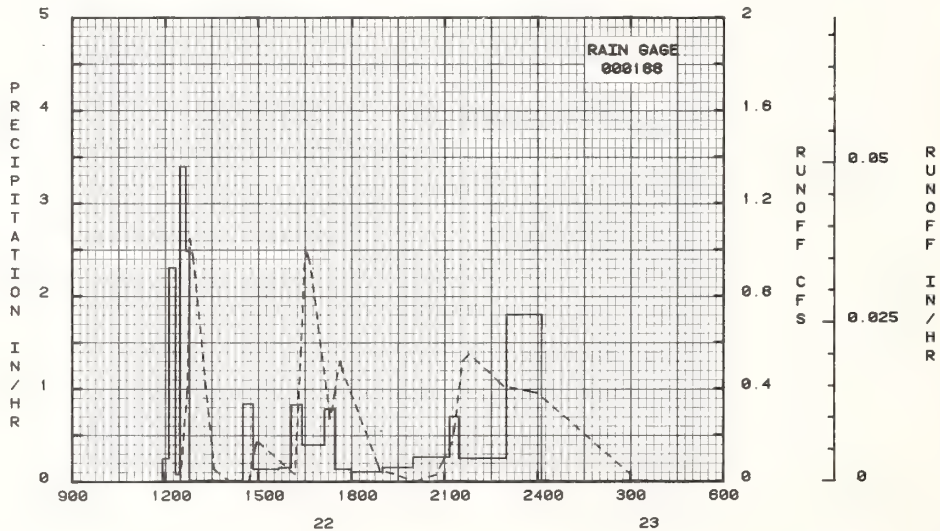
NOTES: Watershed conditions: 100% cropland, entire watershed was planted to wheat in mid-Oct. 1965 and harvested for grain in mid-June 1970. Watershed was moldboard plowed 8-10 inches deep in late June 1970. Area remained in rough condition until mid-Aug. 1970 when watershed was disked and spring-tooth harrowed in preparation for seeding to wheat. Watershed was seeded to wheat in mid-Oct. 1970. For general map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1965, USDA Misc. Pub. 1216, p. 69.37-1. Maps - revised composite, p. 69.7-21; topography, p. 69.37-5 of foregoing reference. Monthly precipitation obtained from Thiessen weighted rainfall values from two recording weighting type rain gages, Nos. 185 and 188. Precipitation and runoff records began April 1, 1965. STA AV based on 6 yr (1965-70) record period. For long-time precipitation records, see National Weather Service records at Chickasha, Okla.

1970 DAILY PRECIPITATION (inches)														CHICKASHA, OKLAHOMA WATERSHED C-8													
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec															
1	0.0	0.0	0.0	0.08	0.0	0.28	0.0	0.0	0.0	0.04	0.13	0.0															
2	0.0	0.0	0.0	0.0	0.0	0.02	0.0	0.0	0.02	0.0	0.0	0.0															
3	0.0	0.0	0.0	0.0	0.0	0.35	0.0	0.0	0.0	0.0	0.0	0.0															
4	0.0	0.0	0.0	0.24	0.0	0.15	0.0	0.0	0.0	0.0	0.0	0.0															
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.68	0.0	0.0															
6	0.0	0.0	1.02	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0															
7	0.0	0.0	0.23	0.0	0.0	0.0	0.0	0.0	0.10	0.39	0.0	0.0															
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.54	0.0	0.0															
9	0.0	0.0	0.0	0.0	0.0	0.0	0.02	0.0	0.0	0.0	0.0	0.0															
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0															
11	0.0	0.0	0.0	0.0	0.0	0.02	0.05	0.0	0.0	0.0	0.0	0.0															
12	0.0	0.0	0.0	0.0	0.0	0.0	0.51	0.0	0.0	0.0	0.0	0.0															
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.44	0.0	0.75	0.0															
14	0.0	0.0	0.0	0.0	2.06	0.0	0.0	0.0	0.07	0.0	0.0	0.0															
15	0.0	0.0	0.0	0.0	0.08	0.0	0.0	0.0	0.0	0.01	0.0	0.27															
16	0.0	0.0	0.49	0.33	0.0	0.0	0.0	0.0	0.72	0.06	0.0	0.0															
17	0.09	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.21	0.16	0.0	0.0															
18	0.0	0.0	0.02	0.0	0.0	0.0	0.0	0.54	0.0	0.0	0.0	0.0															
19	0.0	0.0	0.12	0.0	0.0	0.0	0.0	0.52	0.0	0.0	0.0	0.0															
20	0.0	0.0	0.0	0.0	0.0	0.30	0.26	0.0	0.0	0.0	0.0	0.01															
21	0.0	0.0	0.06	0.0	0.0	0.0	0.0	0.29	0.0	0.0	0.0	0.0															
22	0.0	0.10	0.0	0.0	0.0	0.0	0.0	0.02	3.51	0.37	0.0	0.0															
23	0.0	0.07	0.0	0.0	0.0	0.0	0.0	0.07	0.03	0.0	0.0	0.0															
24	0.0	0.05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0															
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0															
26	0.0	0.6	0.3	0.24	0.0	0.0	0.0	0.0	0.02	0.0	0.0	0.0															
27	0.0	0.16	0.0	0.0	0.05	0.0	0.0	0.0	0.0	0.0	0.0	0.0															
28	0.0	0.10	0.55	0.0	0.0	0.0	0.11	0.0	0.0	0.6	0.0	0.0															
29	0.0		0.0	0.28	0.65	0.0	0.0	0.0	0.0	0.0	0.0	0.0															
30	0.0		0.0	0.89	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0															
31	0.0		0.01		0.03		0.0	0.0		0.0		0.0															
TOTAL	0.09	0.48	2.50	2.06	2.87	1.12	0.55	1.37	5.16	2.28	0.88	0.37															
STA AV	0.81	1.06	2.04	2.74	3.28	1.99	1.92	3.81	3.72	1.58	1.02	0.73															

NOTES: Precipitation values obtained from two recording type rain gages, Nos. 185 and 188. STA AV based on 6 yr (1965-70) record period.

1970 SELECTED RUNOFF EVENT			CHICKASBA, OKLAHOMA WATERSHED C-8							
ANTECEDENT CONDITIONS			RAINFALL				RUNOFF			
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)
EVENT OF SEPTEMBER 22 - 23, 1970										
RG 000188			RG 000188							
9-22	0.0	0.0	9-22	1155	0.0	0.0	9-22	1229	0.0	0.0
				1207	0.2500	0.05		1243	0.413	0.0018
				1220	2.3077	0.55		1248	1.046	0.0039
				1228	0.0750	0.56		1255	0.936	0.0082
				1240	3.4000	1.24		1335	0.055	0.0202
WATERSHED CONDITIONS:				1247	2.4857	1.53		1404	0.0	0.0207
100% cultivation. Harvested				1430	0.0117	1.55		1442	0.0	0.0207
wheat June 6. Chiseled 24-				1450	0.8400	1.83		1456	0.165	0.0213
30 inches deep June 26.				1540	0.1320	1.94		1500	0.165	0.0218
Disked 4-6 inches deep Aug.				1604	0.1500	2.00		1611	0.028	0.0259
21. Spring-tooth harrowed										
Sept. 10.				1625	0.8286	2.29		1622	0.551	0.0278
30 Day Antecedent Conditions:				1708	0.3907	2.57		1629	0.936	0.0310
Date	Rainfall	Runoff		1728	0.7800	2.83		1634	0.991	0.0340
(inches)	(inches)	(inches)		1800	0.1312	2.90		1640	0.936	0.0374
08-18	0.54	0.000		1900	0.1000	3.00		1719	0.275	0.0518
08-19	0.52	0.000								
08-21	0.29	0.000		2000	0.1500	3.15		1728	0.385	0.0536
08-22	0.02	0.000		2110	0.2657	3.46		1733	0.468	0.0548
09-02	0.02	0.000		2128	0.7000	3.67		1738	0.523	0.0564
09-07	0.10	0.000		2200	0.2437	3.80		1744	0.468	0.0581
09-13	0.44	0.000		2300	0.2500	4.05		1855	0.055	0.0694
09-14	0.07	0.000								
09-16	0.72	0.000	9-23	8	0.2118	4.29		2004	0.0	0.0705
09-17	0.21	0.000						2044	0.028	0.0709
09-22	0.11	0.000						2102	0.110	0.0716
								2115	0.165	0.0727
								2121	0.248	0.0734
								2135	0.523	0.0767
								2148	0.551	0.0809
								2254	0.413	0.1002
								2400	0.385	0.1162
							9-23	315	0.0	0.1389

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.03636. Some intermediate breakpoints have been removed to shorten the listing above. Thiessen weighted rainfall using rain gages 185 and 188.



EVENT OF SEPTEMBER 22 - 23, 1970
CHICKASBA, OKLAHOMA WATERSHED C-8

CHICKASHA, OKLAHOMA WATERSHED R-1

LOCATION: Caddo County, Oklahoma; NE 1/4, sec. 21, T. 8 N., R. 9 W., about 4-3/4 miles North and 3-1/4 miles West of Verden, Oklahoma; Washita River Basin.

AREA: 17.76 acres

MONTHLY PRECIPITATION AND RUNOFF (inches)													CHICKASHA, OKLAHOMA WATERSHED R-1	
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
1970	P	0.18	0.31	3.80	3.12	4.94	2.93	1.38	0.87	4.53	2.27	0.59	0.31	25.23
	Q	0.0	0.0	0.0	0.003	0.053	0.257	0.001	0.0	0.006	0.005	0.0	0.0	0.325
STA AV	P	0.61	0.98	1.68	3.32	3.47	4.12	1.45	3.12	4.10	1.69	1.75	0.78	27.08
	Q	0.0	0.0	0.0	0.018	0.015	0.041	0.000	0.004	0.006	0.001	0.003	0.0	0.089

NOTES: Watershed conditions: Watershed is in range and pasture grasses and within the same fence enclosure as Watersheds R-2, R-3 and R-4. All have essentially the same grazing management. There is a good hydrologic cover of weeds, annual grasses, low order perennial grasses and some climax grass species, however, the range condition class is poor. The watershed was fertilized and sprig-sodded to bermuda in 20-inch rows in spring of 1970. Because of unfavorable weather conditions, a poor stand resulted. For description and map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1965, USDA Misc. Pub. 1216, pp. 69.38-1 and 69.38-2. Precipitation data obtained from recording rain gage No. 189. Precipitation records began Jan. 1, 1962. Runoff records began July 1, 1962. STA AV based on 9 yr (1962-70) record period. Runoff measured by stage-volume change in a farm pond. For long-time precipitation records, see National Weather Service records at Chickasha, Okla.

1970	DAILY PRECIPITATION (inches)												CHICKASHA, OKLAHOMA WATERSHED R-1	
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
1	0.0	0.0	0.0	0.52	0.0	0.04	0.0	0.0	0.0	0.0	0.19	0.0		
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.08	0.0	0.0	0.0		
3	0.0	0.0	0.0	0.0	0.0	0.09	0.0	0.14	0.0	0.0	0.0	0.0		
4	0.0	0.0	0.0	0.31	0.0	0.09	0.0	0.0	0.0	0.0	0.0	0.0		
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.11	0.0	0.0		
6	0.0	0.0	1.34	0.0	0.0	0.0	0.04	0.0	0.0	0.0	0.0	0.0		
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.35	0.74	0.0	0.0		
9	0.0	0.0	0.0	0.0	0.0	0.0	0.01	0.0	0.0	0.0	0.0	0.0		
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
11	0.0	0.0	0.0	0.0	0.0	2.42	0.37	0.0	0.0	0.0	0.0	0.0		
12	0.0	0.0	0.01	0.0	0.0	0.0	0.26	0.0	0.0	0.0	0.0	0.0		
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.87	0.0	0.80	0.0		
14	0.0	0.0	0.0	0.0	1.03	0.0	0.0	0.0	0.09	0.0	0.0	0.0		
15	0.0	0.0	0.0	0.0	0.03	0.0	0.0	0.0	0.0	0.03	0.0	0.21		
16	0.0	0.0	0.89	0.37	0.0	0.0	0.0	0.0	0.28	0.12	0.0	0.0		
17	0.18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.27	0.0	0.0		
18	0.0	0.0	0.09	0.0	0.0	0.0	0.0	0.10	0.0	0.0	0.0	0.0		
19	0.0	0.0	0.24	0.0	0.0	0.0	0.0	0.33	0.0	0.0	0.0	0.0		
20	0.0	0.0	0.0	0.0	0.0	0.29	0.31	0.07	0.0	0.0	0.0	0.02		
21	0.0	0.0	0.08	0.0	0.0	0.0	0.0	0.03	0.0	0.0	0.0	0.08		
22	0.0	0.09	0.0	0.0	0.0	0.0	0.0	0.20	2.83	0.0	0.0	0.0		
23	0.0	0.02	0.0	0.0	0.07	0.0	0.0	0.0	0.01	0.0	0.0	0.0		
24	0.0	0.04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.02	0.0	0.0	0.0		
27	0.0	0.02	0.0	0.0	0.0	0.0	0.15	0.0	0.0	0.0	0.0	0.0		
28	0.0	0.14	0.84	0.0	0.51	0.0	0.24	0.0	0.0	0.0	0.0	0.0		
29	0.0	0.0	0.0	0.44	3.28	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
30	0.0	0.16	1.48	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
31	0.0	0.15	0.0	0.02	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
TOTAL	0.18	0.31	3.80	3.12	4.94	2.93	1.38	0.87	4.53	2.27	0.59	0.31		
STA AV	0.61	0.98	1.68	3.32	3.47	4.12	1.45	3.12	4.10	1.69	1.75	0.78		

NOTES: Precipitation values obtained from one recording rain gage, No. 189. STA AV based on 9 yr (1962-70) record period.

CHICKASHA, OKLAHOMA WATERSHED R-2

LOCATION: Caddo County, Oklahoma; NW 1/4, sec. 22, T. 8 N., R. 9 W., about 4-1/2 miles North and 2-3/4 miles West of Verden, Oklahoma; Washita River Basin.

AREA: 24.08 acres

MONTHLY PRECIPITATION AND RUNOFF (inches)														
CHICKASHA, OKLAHOMA WATERSHED R-2														
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
1970	P	0.15	0.32	3.05	2.92	4.59	2.71	1.29	0.73	4.14	2.15	0.54	0.32	22.91
	Q	0.0	0.0	0.0	0.004	0.047	0.097	0.0	0.0	0.005	0.006	0.0	0.0	0.159
STA AV	P	0.56	0.93	1.50	3.24	3.38	4.03	1.41	3.01	3.96	1.64	1.69	0.76	26.11
	Q	0.001	0.0	0.002	0.055	0.031	0.049	0.001	0.031	0.033	0.008	0.010	0.004	0.223

NOTES: Watershed conditions: Watershed is in range and pasture grasses and within the same fence enclosure as Watersheds R-1, R-3 and R-4. All have essentially the same grazing management. There is a good hydrologic cover of weeds, annual grasses, low order perennial grasses and some climax grass species, however, the range condition class is poor. For description and map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1965, USDA Misc. Pub. 1216, pp. 69.39-1 and 69.39-2. Precipitation data obtained from recording rain gage No. 190. Precipitation records began Jan. 1, 1962. Runoff records began July 1, 1962. STA AV based on 9 yr (1962-70) record period. Runoff measured by stage-volume change in a farm pond. For long-time precipitation records, see National Weather Service records at Chickasha, Okla.

1970 DAILY PRECIPITATION (inches)													
CHICKASHA, OKLAHOMA WATERSHED R-2													
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
1	0.0	0.0	0.0	0.45	0.0	0.03	0.0	0.0	0.0	0.0	0.20	0.0	
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.07	0.0	0.0	0.0	
3	0.0	0.0	0.0	0.0	0.0	0.09	0.0	0.06	0.0	0.0	0.0	0.0	
4	0.0	0.0	0.0	0.25	0.0	0.07	0.0	0.0	0.0	0.0	0.0	0.0	
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.15	0.0	0.0	
6	0.0	0.0	1.22	0.0	0.0	0.0	0.05	0.0	0.0	0.0	0.0	0.0	
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.34	0.67	0.0	0.0	
9	0.0	0.0	0.0	0.0	0.0	0.0	0.01	0.0	0.0	0.0	0.0	0.0	
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
11	0.0	0.0	0.0	0.0	0.0	2.27	0.35	0.0	0.0	0.0	0.0	0.0	
12	0.0	0.0	0.01	0.0	0.0	0.0	0.28	0.0	0.0	0.0	0.0	0.0	
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.80	0.0	0.34	0.0	
14	0.0	0.0	0.0	0.0	0.96	0.0	0.0	0.0	0.08	0.0	0.0	0.0	
15	0.0	0.0	0.0	0.0	0.04	0.0	0.0	0.0	0.0	0.02	0.0	0.22	
16	0.0	0.0	0.57	0.31	0.0	0.0	0.0	0.0	0.24	0.08	0.0	0.0	
17	0.15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.23	0.0	0.0	
18	0.0	0.0	0.04	0.0	0.0	0.0	0.0	0.10	0.0	0.0	0.0	0.0	
19	0.0	0.0	0.19	0.0	0.0	0.0	0.0	0.26	0.0	0.0	0.0	0.0	
20	0.0	0.0	0.0	0.0	0.0	0.25	0.26	0.09	0.0	0.0	0.0	0.02	
21	0.0	0.0	0.06	0.0	0.0	0.0	0.0	0.03	0.0	0.0	0.0	0.08	
22	0.0	0.10	0.0	0.0	0.0	0.0	0.0	0.19	2.59	0.0	0.0	0.0	
23	0.0	0.01	0.0	0.0	0.06	0.0	0.0	0.0	0.01	0.0	0.0	0.0	
24	0.0	0.05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.01	0.0	0.0	0.0	
27	0.0	0.01	0.0	0.0	0.0	0.0	0.11	0.0	0.0	0.0	0.0	0.0	
28	0.0	0.15	0.70	0.0	0.46	0.0	0.23	0.0	0.0	0.0	0.0	0.0	
29	0.0		0.0	0.46	3.05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
30	0.0		0.16	1.45	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
31	0.0		0.10		0.02		0.0	0.0		0.0		0.0	
TOTAL	0.15	0.32	3.05	2.92	4.59	2.71	1.29	0.73	4.14	2.15	0.54	0.32	
STA AV	0.56	0.93	1.50	3.24	3.38	4.03	1.41	3.01	3.96	1.64	1.69	0.76	

NOTES: Precipitation values obtained from one recording rain gage, No. 190. STA AV based on 9 yr (1962-70) record period.

CHICKASHA, OKLAHOMA WATERSHED R-3

LOCATION: Caddo County, Oklahoma; NE 1/4, sec/ 21. T. 8 N., R. 9 W., about 4-1/2 miles North and 3-1/4 miles West of Verden, Oklahoma; Washita River Basin.

AREA: 25.84 acres

MONTHLY PRECIPITATION AND RUNOFF (inches)													CHICKASHA, OKLAHOMA WATERSHED R-3	
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
1970	P	0.14	0.33	3.02	2.85	4.36	2.72	1.22	0.71	4.07	2.15	0.50	0.31	22.38
	Q	0.0	0.0	0.0	0.002	0.020	0.032	0.0	0.0	0.002	0.003	0.0	0.0	0.059
STA AV	P	0.55	0.93	1.51	3.21	3.30	4.00	1.39	2.98	3.87	1.63	1.66	0.74	25.76
	Q	0.0	0.0	0.001	0.023	0.011	0.017	0.0	0.013	0.016	0.004	0.004	0.001	0.091

NOTES: Watershed conditions: Watershed is in range and pasture grasses and within the same fence enclosure as Watersheds R-1, R-2 and R-4. All have essentially the same grazing management. There is a good hydrologic cover of weeds, annual grasses, low order perennial grasses and some climax grass species, however, the range condition class is poor. For description and map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1965, USDA Misc. Pub. 1216, pp. 69.40-1 and 69.39-2. Precipitation data obtained from recording rain gage No. 191. Precipitation records began Jan. 1, 1962. STA AV based on 9 yr (1962-70) record period. Runoff measured by stage-volume change in a farm pond. For long-time precipitation records, see National Weather Service records at Chickasha, Okla.

1970 DAILY PRECIPITATION (inches)													CHICKASHA, OKLAHOMA WATERSHED R-3	
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
1	0.0	0.0	0.0	0.42	0.0	0.02	0.0	0.0	0.0	0.0	0.19	0.0		
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.06	0.0	0.0	0.0		
3	0.0	0.0	0.0	0.0	0.0	0.08	0.0	0.05	0.0	0.0	0.0	0.0		
4	0.0	0.0	0.0	0.25	0.0	0.09	0.0	0.0	0.0	0.0	0.0	0.0		
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.17	0.0	0.0		
6	0.0	0.0	1.22	0.0	0.0	0.0	0.05	0.0	0.0	0.0	0.0	0.0		
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.35	0.66	0.0	0.0		
9	0.0	0.0	0.0	0.0	0.0	0.0	0.01	0.0	0.0	0.0	0.0	0.0		
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
11	0.0	0.0	0.0	0.0	0.0	2.30	0.32	0.0	0.0	0.0	0.0	0.0		
12	0.0	0.0	0.01	0.0	0.0	0.0	0.29	0.0	0.0	0.0	0.0	0.0		
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.76	0.0	0.31	0.0		
14	0.0	0.0	0.0	0.0	0.87	0.0	0.0	0.0	0.08	0.0	0.0	0.0		
15	0.0	0.0	0.0	0.0	0.02	0.0	0.0	0.0	0.0	0.02	0.0	0.21		
16	0.0	0.0	0.55	0.33	0.0	0.0	0.0	0.0	0.24	0.09	0.0	0.0		
17	0.14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.21	0.0	0.0		
18	0.0	0.0	0.05	0.0	0.0	0.0	0.0	0.08	0.0	0.0	0.0	0.0		
19	0.0	0.0	0.20	0.0	0.0	0.0	0.0	0.26	0.0	0.0	0.0	0.0		
20	0.0	0.0	0.0	0.0	0.0	0.23	0.23	0.09	0.0	0.0	0.0	0.03		
21	0.0	0.0	0.06	0.0	0.0	0.0	0.0	0.03	0.0	0.0	0.0	0.07		
22	0.0	0.11	0.0	0.0	0.0	0.0	0.0	0.19	2.55	0.0	0.0	0.0		
23	0.0	0.01	0.0	0.0	0.06	0.0	0.0	0.0	0.01	0.0	0.0	0.0		
24	0.0	0.05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.02	0.0	0.0	0.0		
27	0.0	0.02	0.0	0.0	0.0	0.0	0.11	0.0	0.0	0.0	0.0	0.0		
28	0.0	0.14	0.70	0.0	0.43	0.0	0.21	0.0	0.0	0.0	0.0	0.0		
29	0.0	0.0	0.0	0.45	2.97	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
30	0.0	0.13	1.40	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
31	0.0	0.10	0.0	0.01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
TOTAL	0.14	0.33	3.02	2.85	4.36	2.72	1.22	0.71	4.07	2.15	0.50	0.31		
STA AV	0.55	0.93	1.51	3.21	3.30	4.00	1.39	2.98	3.87	1.63	1.66	0.74		

NOTES: Precipitation values obtained from one recording rain gage, No. 191. STA AV based on 9 yr (1962-70) record period.

CHICKASHA, OKLAHOMA WATERSHED R-4

LOCATION: Caddo County, Oklahoma; NW 1/4, sec. 22, T. 8 N. R. 9 W., about 4-1/2 miles North and 2-1/2 miles West of Verden, Oklahoma; Washita River Basin.

AREA: 18.12 acres

MONTHLY PRECIPITATION AND RUNOFF (inches)							CHICKASHA, OKLAHOMA WATERSHED R-4							
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
1970	P	0.12	0.34	3.11	3.07	5.25	3.25	1.29	0.75	4.52	2.15	0.47	0.31	24.63
	Q	0.0	0.0	0.0	0.001	0.036	0.085	0.0	0.0	0.001	0.0	0.0	0.0	0.123
STA AV	P	0.59	0.89	1.49	3.33	3.53	4.21	1.39	3.05	4.06	1.71	1.71	0.75	26.70
	Q	0.0	0.0	0.0	0.069	0.018	0.034	0.0	0.021	0.018	0.004	0.004	0.0	0.167

NOTES: Watershed conditions: Watershed is in range and pasture grasses and within the same fence enclosure as Watersheds E-1, E-2 and E-3. All have essentially the same grazing management. There is a good hydrologic cover of weeds, annual grasses, low order perennial grasses, and some climax grass species, however, the range condition class is poor. For description and map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1965, USDA Misc. Pub. 1216, pp. 69.41-1 and 69.41-2. Precipitation data obtained from recording rain gage No. 192. Precipitation records began Jan. 1, 1962. STA AV based on 9 yr (1962-70) record period. Run-off measured by stage-volume change in a farm pond. For long-time precipitation records, see National Weather Service records at Chickasha, Okla.

1970 DAILY PRECIPITATION (inches) CHICKASHA, OKLAHOMA WATERSHED R-4													
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
1	0.0	0.0	0.0	0.46	0.0	0.02	0.0	0.0	0.0	0.0	0.17	0.0	
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.06	0.0	0.0	0.0	
3	0.0	0.0	0.0	0.0	0.0	0.10	0.0	0.07	0.0	0.0	0.0	0.0	
4	0.0	0.0	0.0	0.30	0.0	0.11	0.0	0.0	0.0	0.0	0.0	0.0	
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.14	0.0	0.0	
6	0.0	0.0	1.33	0.0	0.0	0.0	0.05	0.0	0.0	0.0	0.0	0.0	
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.36	0.70	0.0	0.0	
9	0.0	0.0	0.0	0.0	0.0	0.0	0.01	0.0	0.0	0.0	0.0	0.0	
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
11	0.0	0.0	0.0	0.0	0.0	2.76	0.30	0.0	0.0	0.0	0.0	0.0	
12	0.0	0.0	0.01	0.0	0.0	0.0	0.24	0.0	0.0	0.0	0.0	0.0	
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.88	0.0	0.30	0.0	
14	0.0	0.0	0.0	0.0	1.15	0.0	0.0	0.0	0.08	0.0	0.0	0.0	
15	0.0	0.0	0.0	0.0	0.05	0.0	0.0	0.0	0.0	0.01	0.0	0.20	
16	0.0	0.0	0.49	0.20	0.0	0.0	0.0	0.0	0.27	0.09	0.0	0.0	
17	0.12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.21	0.0	0.0	
18	0.0	0.0	0.09	0.0	0.0	0.0	0.0	0.10	0.0	0.0	0.0	0.0	
19	0.0	0.0	0.19	0.0	0.0	0.0	0.03	0.25	0.0	0.0	0.0	0.0	
20	0.0	0.0	0.0	0.0	0.0	0.26	0.26	0.09	0.0	0.0	0.0	0.03	
21	0.0	0.0	0.10	0.0	0.0	0.0	0.0	0.02	0.0	0.0	0.0	0.08	
22	0.0	0.10	0.0	0.0	0.0	0.0	0.0	0.22	2.81	0.0	0.0	0.0	
23	0.0	0.04	0.0	0.0	0.05	0.0	0.0	0.0	0.02	0.0	0.0	0.0	
24	0.0	0.04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.04	0.0	0.0	0.0	
27	0.0	0.02	0.0	0.0	0.0	0.0	0.13	0.0	0.0	0.0	0.0	0.0	
28	0.0	0.14	0.65	0.0	0.38	0.0	0.27	0.0	0.0	0.0	0.0	0.0	
29	0.0	0.0	0.43	0.0	3.60	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
30	0.0	0.15	1.68	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
31	0.0	0.10	0.0	0.02	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
TOTAL	0.12	0.34	3.11	3.07	5.25	3.25	1.29	0.75	4.52	2.15	0.47	0.31	
STA AV	0.59	0.89	1.49	3.33	3.53	4.21	1.39	3.05	4.06	1.71	1.71	0.75	

NOTES: Precipitation obtained from one recording rain gage, No. 192. STA AV based on 9 yr (1962-70) record period.

CHICKASHA, OKLAHOMA WATERSHED R-5

LOCATION: Grady County, Oklahoma; SW 1/4, sec. 12, T. 7 N., R. 6 W., about 6 miles east and 3 miles north of Chickasha, Oklahoma; Washita River Basin.

AREA: 23.72 acres

MONTHLY PRECIPITATION AND RUNOFF (inches)														CHICKASHA, OKLAHOMA WATERSHED R-5													
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual													
1970	P	0.13	0.67	2.28	2.71	3.32	1.25	1.08	1.96	7.06	3.02	1.10	0.37	24.95													
	Q	0.0	0.0	0.0	0.002	0.037	0.0	0.0	0.0	0.291	0.017	0.0	0.0	0.347													
STA AV	P	0.91	1.10	2.11	3.20	4.24	2.41	2.86	2.58	4.32	2.03	1.40	0.92	28.08													
	Q	0.0	0.038	0.057	0.269	0.178	0.115	0.066	0.0	0.061	0.003	0.005	0.0	0.792													
ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																											
		Maximum Discharge		1 Hour		2 Hours		6 Hours		12 Hours		1 Day		2 Days		8 Days											
		Date	Rate	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.										
1970		9-22	0.129	9-22	0.093	9-22	0.130	9-22	0.218	9-22	0.280	9-22	0.291	9-21	0.291	9-15	0.291										
MAXIMUMS FOR PERIOD OF RECORD																											
		4-12	0.879	4-12	0.577	4-12	0.721	4-12	0.790	4-12	0.806	4-12	0.813	4-10	0.947	4- 9	1.066										
		1967		1967		1967		1967		1967		1967		1967		1967											

NOTES: Watershed conditions: 100% rangeland, native grass rangeland, continuously grazed by beef cattle during recent years. Range condition class during 1970 was good, however, entire area was slightly overgrazed during the spring and summer. The vegetative cover in early December 1970, based on 25 clipped samples uniformly spaced, averaged 1,450 pounds of standing grass, 200 pounds of weeds, and 1,900 pounds of mulch per acre. Prior to Oct. 1970 this watershed was within the same pasture area as Watershed R-6, however, was subjected to a slightly heavier grazing rate. For general description of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1966, USDA Misc. Pub. 1226, p. 69.42-1; maps - topography, 1966, p. 69.42-3 of foregoing reference; revised composite, 1965, USDA Misc. Pub. 1216, p. 69.7-21. Monthly precipitation obtained from Thiessen weighted rainfall values from two gages, Nos. 195 and 196. Precipitation and runoff records began July 1, 1966. STA AV based on 5 yr (1966-70) record period. For long-time precipitation records, see National Weather Service records at Chickasha, Okla.

1970 DAILY PRECIPITATION (inches)														CHICKASHA, OKLAHOMA WATERSHED R-5													
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec															
1	0.0	0.0	0.0	0.14	0.0	0.13	0.0	0.0	0.0	0.02	0.18	0.0															
2	0.0	0.0	0.01	0.0	0.0	0.02	0.0	0.0	0.05	0.0	0.0	0.0															
3	0.0	0.0	0.0	0.0	0.0	0.74	0.0	0.0	0.0	0.0	0.0	0.0															
4	0.0	0.0	0.0	0.34	0.0	0.23	0.0	0.0	0.0	0.0	0.0	0.0															
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.12	0.0	0.0															
6	0.0	0.0	0.62	0.0	0.0	0.0	0.02	0.0	0.0	0.0	0.0	0.0															
7	0.0	0.0	0.25	0.0	0.0	0.0	0.0	0.0	0.02	0.68	0.0	0.0															
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.55	0.0	0.0															
9	0.0	0.0	0.0	0.0	0.0	0.0	0.09	0.0	0.0	0.0	0.0	0.0															
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0															
11	0.0	0.0	0.0	0.0	0.0	0.03	0.0	0.0	0.07	0.0	0.0	0.0															
12	0.0	0.0	0.0	0.0	0.0	0.0	0.36	0.0	0.0	0.0	0.0	0.0															
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.53	0.0	0.92	0.0															
14	0.0	0.0	0.0	0.0	1.59	0.0	0.0	0.0	0.62	0.0	0.0	0.0															
15	0.0	0.0	0.0	0.0	0.10	0.0	0.0	0.0	0.0	0.0	0.0	0.27															
16	0.0	0.0	0.50	0.38	0.0	0.0	0.0	0.0	0.34	0.05	0.0	0.0															
17	0.13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.51	0.12	0.0	0.0															
18	0.0	0.0	0.03	0.41	0.0	0.0	0.0	1.07	0.0	0.0	0.0	0.0															
19	0.0	0.0	0.15	0.0	0.0	0.0	0.0	0.75	0.0	0.0	0.0	0.0															
20	0.0	0.0	0.0	0.0	0.0	0.10	0.36	0.0	0.0	0.0	0.0	0.0															
21	0.0	0.0	0.08	0.0	0.0	0.0	0.0	0.02	0.0	0.0	0.0	0.10															
22	0.0	0.26	0.0	0.0	0.0	0.0	0.0	0.12	4.78	0.45	0.0	0.0															
23	0.0	0.05	0.0	0.0	0.0	0.0	0.0	0.0	0.09	0.03	0.0	0.0															
24	0.0	0.09	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0															
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0															
26	0.0	0.0	0.0	0.03	0.0	0.0	0.0	0.0	0.05	0.0	0.0	0.0															
27	0.0	0.12	0.0	0.0	0.19	0.0	0.03	0.0	0.0	0.0	0.0	0.0															
28	0.0	0.15	0.63	0.0	0.0	0.0	0.22	0.0	0.0	0.0	0.0	0.0															
29	0.0	0.0	0.0	0.43	1.42	0.0	0.0	0.0	0.0	0.0	0.0	0.0															
30	0.0	0.0	0.0	0.98	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0															
31	0.0	0.0	0.01	0.02	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0															
TOTAL	0.13	0.67	2.28	2.71	3.32	1.25	1.08	1.96	7.06	3.02	1.10	0.37															
STA AV	0.91	1.10	2.11	3.20	4.24	2.41	2.86	2.58	4.32	2.03	1.40	0.92															

NOTES: Precipitation obtained from Thiessen weighted values from two gages, Nos. 195 and 196. STA AV based on 5 yr (1966-70) record period.

1970 MEAN DAILY DISCHARGE (cfs) CHICKASHA, OKLAHOMA WATERSHED R-5												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.005	0.0	0.0
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.013	0.0	0.0
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	0.0	0.0	0.0	0.0	0.015	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.003	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.270	0.0	0.0	0.0
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.020	0.0	0.0	0.0
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	0.0	0.0	0.0	0.0	0.019	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	0.0	0.0	0.0	0.002	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MEAN	0.0	0.0	0.0	0.0001	0.0012	0.0	0.0	0.0	0.0097	0.0006	0.0	0.0
INCHES	0.0	0.0	0.0	0.002	0.037	0.0	0.0	0.0	0.291	0.017	0.0	0.0
STA AV	0.0	0.038	0.057	0.269	0.178	0.115	0.066	0.0	0.061	0.003	0.005	0.0

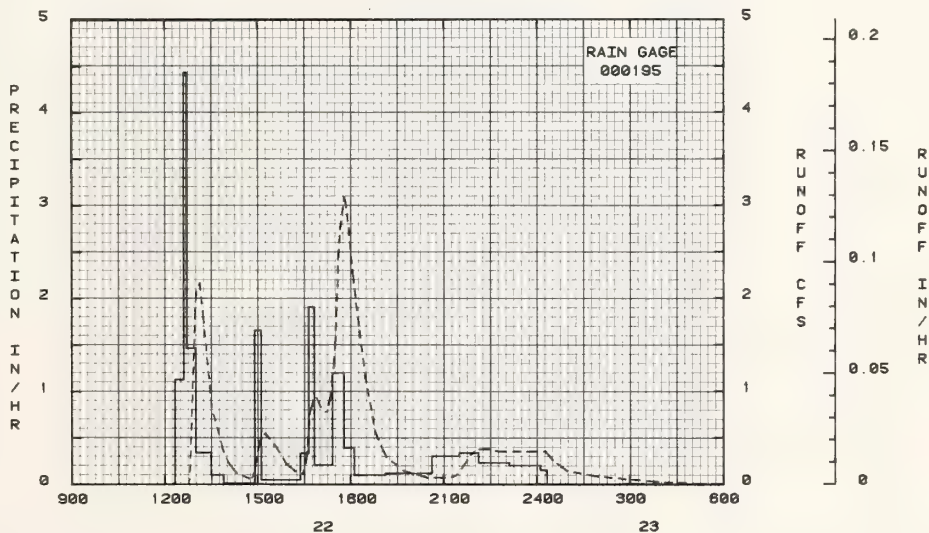
NOTES: To convert mean daily discharge in CFS to IN/DAY, multiply by 1.003442. STA AV based on 5 yr (1966-70) record period.

1970			SELECTED RUNOFF EVENT			CHICKASHA, OKLAHOMA WATERSHED R-5						
ANTECEDENT CONDITIONS			RAINFALL			RUNOFF						
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.		
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)		
EVENT OF SEPTEMBER 22 - 23, 1970												
RG 000195			RG 000195									
9-22	0.0	0.0	9-22	1220	0.0	0.0	9-22	1206	0.0	0.0		
				1237	1.1294	0.32		1248	0.057	0.0		
				1242	4.4400	0.69		1259	1.819	0.0072		
				1300	1.4667	1.13		1301	2.077	0.0101		
				1330	0.3400	1.30		1308	2.168	0.0205		
WATERSHED CONDITIONS:												
100% virgin rangeland.						1.34		1316	1.738	0.0314		
Vegetation consisted of tall						1.35		1331	0.826	0.0448		
and mid-tall grasses. Area						1.71		1354	0.346	0.0542		
subjected to continuous						1.77		1405	0.216	0.0564		
grazing, slightly in excess						1.86		1419	0.121	0.0581		
of optimum. Range con-												
dition class good to ex-						1.9091	2.21	1444	0.057	0.0596		
cellent.						0.2057	2.33	1449	0.068	0.0598		
						1.2000	2.77	1453	0.121	0.0601		
30 Day Antecedent Conditions:						0.3900	2.90	1455	0.194	0.0603		
Rainfall Runoff						0.1000	3.00	1458	0.289	0.0608		
Date	(inches)	(inches)										
08-18	1.07	0.000				0.1200	3.18	1501	0.376	0.0615		
08-19	0.75	0.000				0.3057	3.45	1505	0.478	0.0627		
08-21	0.02	0.000				0.3405	3.66	1515	0.554	0.0663		
08-22	0.12	0.000				0.2300	3.89	1535	0.409	0.0730		
09-02	0.05	0.000	9-23	7	0.2000	4.09		1556	0.216	0.0775		
09-07	0.02	0.000										
09-11	0.07	0.000				0.1500	4.12	1613	0.137	0.0796		
09-13	0.53	0.000						1626	0.106	0.0807		
09-14	0.62	0.000						1630	0.155	0.0811		
09-16	0.34	0.000						1633	0.239	0.0815		
09-17	0.51	0.000						1636	0.346	0.0821		
09-22	0.53	0.000										
								1638	0.515	0.0827		
								1640	0.682	0.0835		
								1641	0.776	0.0840		
								1647	0.878	0.0875		
								1654	0.931	0.0919		
								1702	0.826	0.0968		
								1711	0.776	0.1018		
								1715	0.776	0.1001		
								1718	0.878	0.1057		
								1722	0.987	0.1083		

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.04181. Antecedent precipitation amounts are from Thiessen weighted rainfall using rain gages 195 and 196.

1970	SELECTED RUNOFF EVENT					CHICKASHA, OKLAHOMA WATERSHED R-5						
ANTECEDENT CONDITIONS			RAINFALL				RUNOFF					
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.		
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)		
EVENT OF SEPTEMBER 22 - 23, 1970 (CONTINUED)												
							9-22	1724	1.105	0.1098		
								1727	1.297	0.1124		
								1730	1.507	0.1154		
								1733	1.903	0.1187		
								1736	2.454	0.1233		
								1740	2.763	0.1305		
								1748	3.094	0.1468		
								1752	2.981	0.1552		
								1806	2.168	0.1804		
								1828	1.167	0.2060		
								1848	0.554	0.2180		
								1909	0.289	0.2242		
								1944	0.137	0.2294		
								2028	0.068	0.2325		
								2044	0.068	0.2333		
								2102	0.068	0.2342		
								2117	0.079	0.2350		
								2127	0.106	0.2357		
								2137	0.194	0.2367		
								2146	0.263	0.2382		
								2152	0.317	0.2394		
								2159	0.346	0.2410		
								2208	0.376	0.2433		
								2227	0.376	0.2483		
								2247	0.346	0.2533		
								2400	0.346	0.2709		
							9-23	17	0.346	0.2750		
								30	0.263	0.2778		
								39	0.216	0.2793		
								58	0.137	0.2816		
								158	0.079	0.2861		
								354	0.020	0.2901		

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.04181. Antecedent precipitation amounts are from Thiessen weighted rainfall using rain gages 195 and 196.



EVENT OF SEPTEMBER 22 - 23, 1970
CHICKASHA, OKLAHOMA WATERSHED R-5

CHICKASHA, OKLAHOMA WATERSHED R-6

LOCATION: Grady County, Oklahoma; SW 1/4, sec. 12, T. 7 N., R. 6 W., about 8-1/2 miles east and 3 miles north of Chickasha, Oklahoma; Washita River Basin.

AREA: 27.22 acres

MONTHLY PRECIPITATION AND RUNOFF (inches)														CHICKASHA, OKLAHOMA WATERSHED R-6													
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual													
1970	P	0.12	0.66	2.29	2.65	3.33	1.26	1.03	2.02	7.16	2.98	1.14	0.34	24.98													
	Q	0.0	0.0	0.0	0.017	0.047	0.0	0.0	0.0	0.252	0.028	0.0	0.0	0.344													
STA AV	P	0.92	1.15	2.11	3.13	4.36	2.40	2.84	2.60	4.36	2.00	1.40	3.92	28.17													
	Q	0.0	0.019	0.039	0.282	0.215	0.077	0.050	0.007	0.062	0.007	0.008	0.0	0.766													
ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																											
		Maximum Discharge		1 Hour		2 Hours		Maximum Volume for Selected Time Interval		6 Hours		12 Hours		1 Day		2 Days		8 Days									
		Date	Rate	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.								
1970		9-22	0.092	9-22	0.065	9-22	0.099	9-22	0.158	9-22	0.240	9-22	0.252	9-22	0.252	9-22	0.252	9-22	0.252								
MAXIMUMS FOR PERIOD OF RECORD																											
		4-12	1.066	4-12	0.658	4-12	0.808	4-12	0.879	4-12	0.689	4-12	0.892	4-11	0.589	4-10	1.098										
		1967		1967		1967		1967		1967		1967		1967		1967											

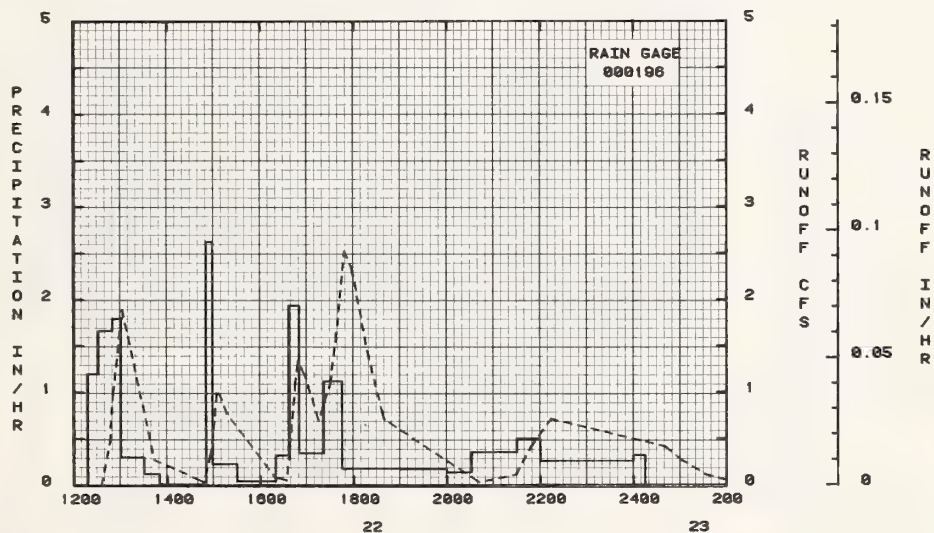
NOTES: Watershed conditions: 100% rangeland, native grass continuously grazed by beef cattle during recent years. Range condition class during the year was good to excellent, however, entire area was slightly overgrazed throughout the year. The vegetative cover in mid-Nov. 1970, based on 25 uniformly spaced clipped samples, averaged 2,500 pounds of standing grass, 200 pounds of weeds, and 2,700 pounds of mulch. This watershed was in the same pasture area as Watershed R-5, however, was subjected to a slightly lighter grazing rate. For general description and map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1966, USDA Misc. Pub. 1226, pp. 69.43-1 and 69.43-3. Monthly precipitation obtained from Thiessen weighted rainfall values from two gages, Nos. 196 and 197. Precipitation and runoff records began July 1, 1966. STA AV based on 5 yr (1966-70) record period. For long-time precipitation records, see National Weather Service records at Chickasha, Oklahoma.

1970 DAILY PRECIPITATION (inches)													CHICKASHA, OKLAHOMA WATERSHED R-6												
	Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec												
1		0.0	0.0	0.0	0.16	0.0	0.11	0.0	0.0	0.0	0.02	0.19	0.0												
2		0.0	0.0	0.01	0.0	0.0	0.03	0.0	0.0	0.05	0.0	0.0	0.0												
3		0.0	0.0	0.0	0.0	0.0	0.74	0.0	0.0	0.0	0.0	0.0	0.0												
4		0.0	0.0	0.0	0.34	0.0	0.23	0.0	0.0	0.0	0.0	0.0	0.0												
5		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.07	0.0	0.0												
6		0.0	0.0	0.59	0.0	0.0	0.0	0.03	0.0	0.0	0.0	0.0	0.0												
7		0.0	0.0	0.26	0.0	0.0	0.0	0.0	0.0	0.02	0.72	0.0	0.0												
8		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.55	0.0	0.0												
9		0.0	0.0	0.0	0.0	0.0	0.0	0.09	0.0	0.0	0.0	0.0	0.0												
10		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0												
11		0.0	0.0	0.0	0.0	0.0	0.05	0.0	0.0	0.08	0.0	0.0	0.0												
12		0.0	0.0	0.0	0.0	0.0	0.0	0.36	0.0	0.0	0.0	0.0	0.0												
13		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.54	0.0	0.95	0.0												
14		0.0	0.0	0.0	0.0	1.63	0.0	0.0	0.0	0.67	0.0	0.0	0.0												
15		0.0	0.0	0.0	0.0	0.11	0.0	0.0	0.0	0.0	0.0	0.0	0.25												
16		0.0	0.0	0.54	0.35	0.0	0.0	0.0	0.0	0.33	0.04	0.0	0.0												
17		0.12	0.0	0.0	0.01	0.0	0.0	0.0	0.0	0.50	0.13	0.0	0.0												
18		0.0	0.0	0.04	0.32	0.0	0.0	0.0	1.06	0.0	0.0	0.0	0.0												
19		0.0	0.0	0.15	0.0	0.0	0.0	0.0	0.81	0.0	0.0	0.0	0.0												
20		0.0	0.0	0.0	0.0	0.0	0.10	0.36	0.0	0.0	0.0	0.0	0.0												
21		0.0	0.0	0.06	0.0	0.0	0.0	0.0	0.02	0.0	0.0	0.0	0.09												
22		0.0	0.23	0.0	0.0	0.0	0.0	0.0	0.13	4.83	0.43	0.0	0.0												
23		0.0	0.06	0.0	0.0	0.0	0.0	0.0	0.0	0.09	0.02	0.0	0.0												
24		0.0	0.08	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0												
25		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0												
26		0.0	0.0	0.0	0.05	0.0	0.0	0.0	0.0	0.05	0.0	0.0	0.0												
27		0.0	0.14	0.0	0.0	0.19	0.0	0.02	0.0	0.0	0.0	0.0	0.0												
28		0.0	0.15	0.63	0.0	0.0	0.0	0.17	0.0	0.0	0.0	0.0	0.0												
29		0.0		0.0	0.44	1.38	0.0	0.0	0.0	0.0	0.0	0.0	0.0												
30		0.0		0.0	0.98	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0												
31		0.0		0.01		0.02		0.0	0.0		0.0		0.0												
TOTAL		0.12	0.66	2.29	2.65	3.33	1.26	1.03	2.02	7.16	2.98	1.14	0.34												
STA AV		0.92	1.15	2.11	3.13	4.36	2.40	2.84	2.60	4.36	2.00	1.40	0.92												

NOTES: Precipitation obtained from Thiessen weighted rainfall values from two gages, Nos. 196 and 197. STA AV based on 5 yr (1966-70) record period.

1970 SELECTED RUNOFF EVENT						CHICKASHA, OKLAHOMA WATERSHED R-6				
ANTECEDENT CONDITIONS			RAINFALL			RUNOFF				
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)
EVENT OF SEPTEMBER 22 - 23, 1970										
RG 000196			RG 000196							
9-22	0.0	0.0	9-22	1217	0.0	0.0	9-22	1235	0.0	0.0
				1231	1.2000	0.28		1246	0.466	0.0016
				1249	1.6667	0.78		1250	0.987	0.0033
				1300	1.8000	1.11		1302	1.892	0.0138
				1330	0.3000	1.26		1343	0.274	0.0408
WATERSHED CONDITIONS:				1350	0.1200	1.30		1447	0.027	0.0466
100% virgin rangeland. Vegetation consisted of tall and mid-tall grasses. Area subjected to continuous grazing, slightly in excess of optimum. Range condition class good to excellent.				1450	0.0100	1.31		1457	0.384	0.0479
				1458	2.6250	1.66		1504	0.987	0.0508
				1530	0.2250	1.78		1507	0.987	0.0525
				1620	0.0360	1.81		1517	0.768	0.0579
				1637	0.3177	1.90		1619	0.082	0.0739
				1650	1.9384	2.32		1634	0.055	0.0745
				1722	0.3375	2.50		1646	1.152	0.0789
				1745	1.1217	2.93		1649	1.344	0.0812
				1900	0.1760	3.15		1659	1.152	0.0887
30 Day Antecedent Conditions:										
Date	Rainfall	Runoff								
	(inches)	(inches)								
08-18	1.06	0.000								
08-19	0.81	0.000		2000	0.1700	3.32		1715	0.686	0.0977
08-21	0.02	0.000		2032	0.1313	3.39		1730	1.097	0.1059
08-22	0.13	0.000		2130	0.3517	3.73		1738	1.646	0.1125
09-02	0.05	0.000		2200	0.5000	3.98		1748	2.523	0.1250
09-07	0.02	0.000		2400	0.2550	4.49		1758	2.331	0.1398
09-11	0.08	0.000								
09-13	0.54	0.000	9-23	15	0.3200	4.57		1818	1.426	0.1626
09-14	0.67	0.000						1839	0.713	0.1763
09-16	0.33	0.000						2041	0.027	0.2037
09-17	0.50	0.000						2129	0.110	0.2057
09-22	0.57	0.000						2148	0.411	0.2087
								2214	0.713	0.2176
							9-23	41	0.411	0.2678
								101	0.274	0.2719
								133	0.110	0.2757
								159	0.055	0.2770

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.03643. Antecedent precipitation amounts are from Thiessen weighted rainfall using rain gages 196 and 197.



EVENT OF SEPTEMBER 22 - 23, 1970
CHICKASHA, OKLAHOMA WATERSHED R-6

CHICKASHA, OKLAHOMA WATERSHED R-7

LOCATION: Grady County, Oklahoma; NW 1/4, sec. 13, T. 7 N., R. 6 W., about 8 miles east and 2-1/2 miles north of Chickasha, Oklahoma; Washita River Basin.

AREA: 19.19 acres

MONTHLY PRECIPITATION AND RUNOFF (inches)													CHICKASHA, OKLAHOMA WATERSHED R-7	
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual	
1970 P	0.12	0.68	2.19	2.47	3.10	1.17	1.11	1.91	6.96	2.95	0.98	0.30	23.94	
Q	0.011	0.0	0.0	0.214	0.422	0.037	0.0	0.055	1.789	0.415	0.005	0.0	2.920	
STA AV P	0.90	1.04	2.05	2.97	4.11	2.36	2.74	2.59	4.19	1.88	1.30	0.87	26.99	
Q	0.076	0.082	0.202	0.659	0.735	0.465	0.419	0.138	0.647	0.177	0.147	0.0	3.748	
ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS														
	Maximum Discharge		1 Hour		2 Hours		6 Hours		12 Hours		1 Day		2 Days	
	Date	Rate	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.
1970	9-22	0.819	9-22	0.504	9-22	0.580	9-22	1.293	9-22	1.730	9-22	1.772	9-21	1.773
													9-15	1.774
MAXIMUMS FOR PERIOD OF RECORD														
	5- 6	2.179	4-12	0.939	6-13	1.143	4-12	1.322	9-22	1.730	9-22	1.772	9-21	1.773
	1969		1967		1969		1967		1970		1970		1970	4- 9 2.266
														1967

NOTES: Watershed conditions: Formerly cultivated from about 1907 until about 1935 when the land use was changed to pasture because of severe erosion. Range condition class during the year was poor to fair. The vegetative cover in mid-Nov. 1970 based on 25 uniformly spaced clipped samples, averaged 1,400 pounds of standing grass, 200 pounds of weeds, and 1,000 pounds per acre of mulch. Prior to Oct. 1970, this watershed was within the same pasture area as Watershed R-8, however, it was enclosed by separate fence in order to implement an improved management program. For general description and map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1966, USDA Misc. Pub. 1226, pp. 69.44-1 and 69.44-3. Monthly precipitation obtained from Thiessen weighted rainfall values from two gages, Nos. 193 and 194. Precipitation and runoff records began July 1, 1966. STA AV based on 5 yr (1966-70) record period. For long-time precipitation records, see National Weather Service records at Chickasha, Oklahoma.

1970 DAILY PRECIPITATION (inches)													CHICKASHA, OKLAHOMA WATERSHED R-7	
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
1	0.0	0.0	0.0	0.16	0.0	0.12	0.0	0.0	0.0	0.03	0.17	0.0		
2	0.0	0.0	0.01	0.0	0.0	0.03	0.0	0.0	0.06	0.0	0.0	0.0		
3	0.0	0.0	0.0	0.0	0.0	0.68	0.0	0.0	0.0	0.0	0.0	0.0		
4	0.0	0.0	0.0	0.27	0.0	0.19	0.0	0.0	0.0	0.0	0.0	0.0		
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.09	0.0	0.0		
6	0.0	0.0	0.63	0.0	0.0	0.0	0.01	0.0	0.0	0.0	0.0	0.0		
7	0.0	0.0	0.26	0.0	0.0	0.0	0.0	0.0	0.04	0.73	0.0	0.0		
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.48	0.0	0.0		
9	0.0	0.0	0.0	0.0	0.0	0.0	0.08	0.0	0.0	0.0	0.0	0.0		
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
11	0.0	0.0	0.0	0.0	0.0	0.04	0.0	0.0	0.06	0.0	0.0	0.0		
12	0.0	0.0	0.0	0.0	0.0	0.0	0.46	0.0	0.0	0.0	0.0	0.0		
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.50	0.0	0.81	0.0		
14	0.0	0.0	0.0	0.0	1.48	0.0	0.0	0.0	0.66	0.0	0.0	0.0		
15	0.0	0.0	0.0	0.0	0.11	0.0	0.0	0.0	0.0	0.0	0.0	0.21		
16	0.0	0.0	0.50	0.36	0.0	0.0	0.0	0.0	0.29	0.04	0.0	0.0		
17	0.12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.45	0.13	0.0	0.0		
18	0.0	0.0	0.01	0.32	0.0	0.0	0.0	1.02	0.0	0.0	0.0	0.0		
19	0.0	0.0	0.13	0.0	0.0	0.0	0.0	0.75	0.0	0.0	0.0	0.0		
20	0.0	0.0	0.0	0.0	0.0	0.11	0.29	0.0	0.0	0.0	0.0	0.0		
21	0.0	0.0	0.07	0.0	0.0	0.0	0.0	0.04	0.0	0.0	0.0	0.09		
22	0.0	0.24	0.0	0.0	0.0	0.0	0.0	0.10	4.80	0.43	0.0	0.0		
23	0.0	0.06	0.0	0.0	0.0	0.0	0.0	0.0	0.06	0.02	0.0	0.0		
24	0.0	0.08	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
26	0.0	0.0	0.0	0.04	0.0	0.0	0.0	0.0	0.04	0.0	0.0	0.0		
27	0.0	0.15	0.0	0.0	0.13	0.0	0.02	0.0	0.0	0.0	0.0	0.0		
28	0.0	0.15	0.57	0.0	0.0	0.0	0.25	0.0	0.0	0.0	0.0	0.0		
29	0.0		0.0	0.40	1.26	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
30	0.0		0.0	0.92	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
31	0.0		0.01		0.12		0.0	0.0		0.0		0.0		
TOTAL	0.12	0.68	2.19	2.47	3.10	1.17	1.11	1.91	6.96	2.95	0.98	0.30		
STA AV	0.90	1.04	2.05	2.97	4.11	2.36	2.74	2.59	4.19	1.88	1.30	0.87		

NOTES: Precipitation obtained from Thiessen weighted rainfall values from two gages, Nos. 193 and 194. STA AV based on 5 yr (1966-70) record period.

1970		MEAN DAILY DISCHARGE (cfs)					CHICKASHA, OKLAHOMA WATERSHED R-7						
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
4	0.0	0.0	0.0	0.0	0.0	0.006	0.0	0.0	0.0	0.0	0.0	0.0	
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.097	0.0	0.0	
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.138	0.0	0.0	
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.093	0.0	0.0	
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
10	0.098	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
11	0.091	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.094	0.0	
14	0.0	0.0	0.0	0.0	0.179	0.0	0.0	0.0	0.011	0.0	0.0	0.0	
15	0.0	0.0	0.0	0.0	0.007	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.002	0.0	0.0	0.0	
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.001	0.0	0.0	0.0	0.0	
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.044	0.0	0.0	0.0	0.0	
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.365	0.007	0.0	0.0	
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.065	0.0	0.0	0.0	
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
29	0.0	0.0	0.0	0.0	0.155	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
30	0.0	0.0	0.0	0.173	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
MEAN	0.0003	0.0	0.0	0.0058	0.0110	0.0002	0.0	0.0014	0.0481	0.0198	0.0001	0.0	
INCHES	0.011	0.0	0.0	0.214	0.422	0.007	0.0	0.055	1.789	0.415	0.005	0.0	
STA AV	0.076	0.082	0.202	0.659	0.735	0.465	0.419	0.138	0.647	0.177	0.147	0.0	

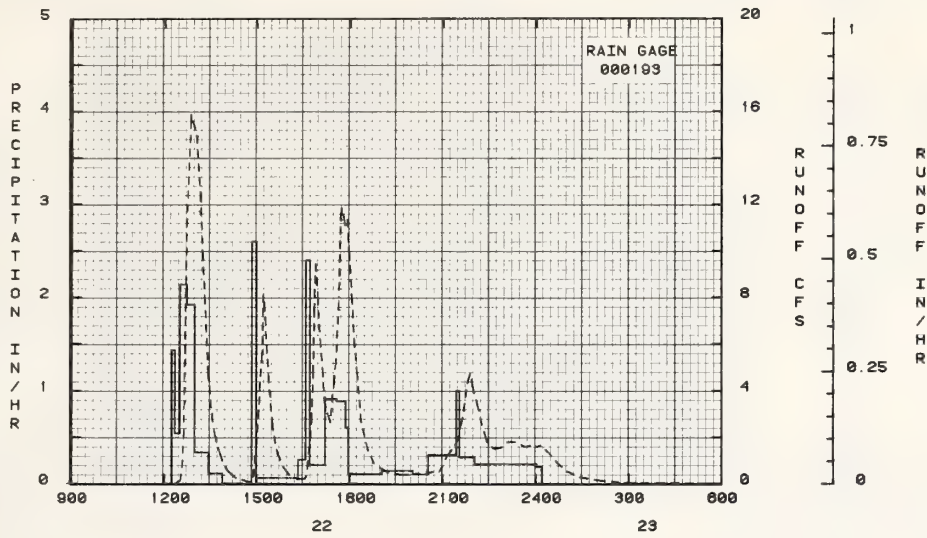
NOTES: To convert mean daily discharge in CFS to IN/DAY, multiply by 1.240315. STA AV based on 5 yr (1966-70) record period.

1970			SELECTED RUNOFF EVENT			CHICKASHA, OKLAHOMA WATERSHED R-7				
ANTECEDENT CONDITIONS			RAINFALL			RUNOFF				
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)
EVENT OF SEPTEMBER 22 - 23, 1970										
RG 000193			RG 000193							
9-22	0.0	0.002	9-22	1215	0.0	0.0	9-22	1218	0.0	0.0
				1220	1.4400	0.12		1223	0.020	0.0
				1230	0.5400	0.21		1225	0.057	0.0001
				1244	2.1429	0.71		1227	0.091	0.0002
				1259	1.9200	1.19		1231	0.120	0.0006
WATERSHED CONDITIONS:										
100% rangeland, formerly			1326	0.3333	1.34		1235	0.721	0.0020	
cultivated but returned to			1353	0.1111	1.39		1238	2.334	0.0060	
range use during the 1930-			1450	3.0	1.39		1243	11.090	0.0344	
40 period after severe			1459	2.6000	1.78		1251	15.860	0.1268	
erosion. Grass cover pri-			1620	0.0593	1.86		1259	15.240	0.2335	
marily annual three-awn and										
little bluestem with a			1634	0.2571	1.92		1302	14.940	0.2731	
large percent of bare ground			1642	2.4000	2.24		1310	12.120	0.3659	
between bluestem bunches.			1712	0.2000	2.34		1314	9.880	0.4036	
Area subjected to continuous			1735	0.9130	2.69		1319	7.718	0.4427	
grazing. Range condition			1752	0.8824	2.94		1325	4.764	0.4742	
class was poor.										
			1757	0.5999	2.99		1332	2.954	0.4976	
30 Day Antecedent Conditions:			1902	0.1015	3.10		1341	1.802	0.5158	
Rainfall Runoff			2002	0.1400	3.24		1353	0.978	0.5304	
Date (inches)	(inches)		2032	0.1000	3.29		1403	0.549	0.5369	
08-18 1.02	0.005		2126	0.3111	3.57		1419	0.236	0.5424	
08-19 0.75	0.054									
08-21 0.04	0.000		2132	0.9999	3.67		1446	0.047	0.5457	
08-22 0.10	0.000		2202	0.2800	3.81		1453	0.286	0.5467	
09-02 0.06	0.000	9-23	2	0.2100	4.23		1459	1.643	0.5516	
09-07 0.04	0.000		12	0.1800	4.26		1510	5.707	0.5865	
09-11 0.06	0.000						1512	8.124	0.5991	
09-13 0.50	0.000									
09-14 0.66	0.000						1514	7.718	0.6119	
09-16 0.29	0.000						1523	4.331	0.6593	
09-17 0.45	0.002						1531	2.334	0.6822	
09-22 0.66	0.002						1540	1.284	0.6961	
							1551	0.721	0.7056	
							1603	0.373	0.7112	
							1618	0.192	0.7148	
							1629	0.192	0.7166	
							1632	0.192	0.7171	
							1636	0.342	0.7180	

NOTES: To convert runoff in CPS to IN/HR, multiply by 0.05168. Antecedent precipitation amounts are from Thiessen weighted rainfall using rain gages 193 and 194.

1970 SELECTED RUNOFF EVENT			CHICKASHA, OKLAHOMA WATERSHED R-7					
ANTECEDENT CONDITIONS			RAINFALL			RUNOFF		
Date Mo-Day	Rainfall (inches)	Runoff (inches)	Date Mo-Day	Time of Day	Intensity (in/hr)	Acc. (inches)	Date Mo-Day	Time of Day
								Rate (cfs)
								Acc. (inches)
EVENT OF SEPTEMBER 22 - 23, 1970 (CONTINUED)								
							9-22	1639
								1643
								1646
								1649
								1651
								1653
								1658
								1703
								1708
								1710
								1713
								1722
								1729
								1733
								1738
								1741
								1744
								1750
								1754
								1759
								1804
								1809
								1815
								1822
								1835
								1847
								1902
								1915
								1939
								1954
								2007
								2015
								2029
								2041
								2054
								2109
								2116
								2126
								2139
								2148
								2153
								2158
								2207
								2216
								2226
								2239
								2254
								2306
								2320
								2339
								2349
								2400
							9-23	9
								21
								41
								101
								128
								214

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.05168. Antecedent precipitation amounts are from Thiessen weighted rainfall using rain gages 193 and 194.



EVENT OF SEPTEMBER 22 - 23, 1970
CHICKASHA, OKLAHOMA WATERSHED R-7

CHICKASHA, OKLAHOMA WATERSHED R-8

LOCATION: Grady County, Oklahoma; NW 1/4 sec. 13, T. 7 N., R. 6 W., about 8-1/2 miles east and 2-1/2 miles north of Chickasha, Oklahoma; Washita River Basin.

AREA: 27.55 acres

MONTHLY PRECIPITATION AND RUNOFF (inches)										CHICKASHA, OKLAHOMA WATERSHED R-8									
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual					
1970	P	0.14	0.66	2.30	2.37	3.20	1.21	0.99	2.02	7.07	2.85	1.05	0.30	24.16					
	Q	0.0	0.0	0.0	0.058	0.265	0.003	0.0	0.042	1.393	0.245	0.091	0.0	2.007					
STA AV	P	0.92	1.16	2.14	2.96	4.36	2.40	2.78	2.57	4.29	1.89	1.34	0.91	27.71					
	Q	0.020	0.046	0.088	0.385	0.533	0.302	0.266	0.064	0.414	0.094	0.056	0.001	2.270					
ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																			
		Maximum Discharge		1 Hour		2 Hours		Maximum Volume for Selected Time Interval		6 Hours		12 Hours		1 Day		2 Days		8 Days	
		Date	Rate	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.
1970		9-22	0.614	9-22	0.335	9-22	0.434	9-22	0.944	9-22	1.325	9-22	1.359	9-22	1.359	9-22	1.359	9-22	1.362
MAXIMUMS FOR PERIOD OF RECORD																			
		5-6	1.828	5-6	0.724	4-12	0.840	4-12	0.957	9-22	1.325	9-22	1.359	9-22	1.359	4-10	1.398		
		1969		1969		1967		1967		1970		1970		1970		1970		1967	

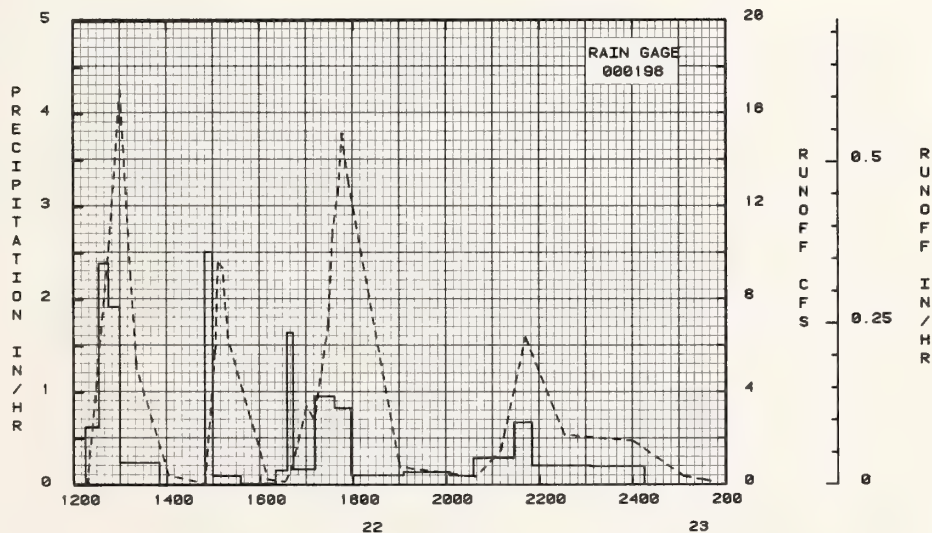
NOTES: Watershed conditions: Formerly cultivated from about 1907, when land use was changed to pasture because of severe erosion. Range condition class during the year was poor to fair. The vegetative cover in mid-Nov. 1970, based on 25 uniformly spaced clipped samples, average 1,400 pounds of standing grass, 100 pounds of weeds, and 1,200 pounds per acre of mulch. For general description and map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1966, USDA Misc. Pub. 1226, pp. 69.45-1 and 69.45-3. Monthly precipitation obtained from Thiessen weighted rainfall values from two gages, Nos. 197 and 198. Precipitation and runoff records began July 1, 1966. STA AV based on 5 yr (1966-70) record period. For long-time precipitation records, see National Weather Service records at Chickasha, Oklahoma.

1970 DAILY PRECIPITATION (inches)													CHICKASHA, OKLAHOMA WATERSHED R-8												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec													
1	0.0	0.0	0.0	0.16	0.0	0.13	0.0	0.0	0.0	0.02	0.16	0.0													
2	0.0	0.0	0.01	0.0	0.0	0.03	0.0	0.0	0.05	0.0	0.0	0.0													
3	0.0	0.0	0.0	0.0	0.0	0.68	0.0	0.0	0.0	0.0	0.0	0.0													
4	0.0	0.0	0.0	0.30	0.0	0.21	0.0	0.0	0.0	0.0	0.0	0.0													
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.01	0.0	0.0													
6	0.0	0.0	0.60	0.0	0.0	0.0	0.02	0.0	0.0	0.0	0.0	0.0													
7	0.0	0.0	0.28	0.0	0.0	0.0	0.0	0.0	0.03	0.72	0.0	0.0													
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.50	0.0	0.0													
9	0.0	0.0	0.0	0.0	0.0	0.0	0.10	0.0	0.0	0.0	0.0	0.0													
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0													
11	0.0	0.0	0.0	0.0	0.0	0.06	0.0	0.0	0.08	0.0	0.0	0.0													
12	0.0	0.0	0.0	0.0	0.0	0.0	0.39	0.0	0.0	0.0	0.0	0.0													
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.51	0.0	0.89	0.0													
14	0.0	0.0	0.0	0.0	0.0	1.61	0.0	0.0	0.77	0.0	0.0	0.0													
15	0.0	0.0	0.0	0.0	0.10	0.0	0.0	0.0	0.0	0.0	0.0	0.21													
16	0.0	0.0	0.55	0.32	0.0	0.0	0.0	0.0	0.32	0.04	0.0	0.0													
17	0.13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.44	0.14	0.0	0.0													
18	0.01	0.0	0.02	0.23	0.0	0.0	0.0	0.0	1.03	0.0	0.0	0.0													
19	0.0	0.0	0.16	0.0	0.0	0.0	0.0	0.83	0.0	0.0	0.0	0.0													
20	0.0	0.0	0.0	0.0	0.0	0.10	0.31	0.0	0.0	0.0	0.0	0.0													
21	0.0	0.0	0.07	0.0	0.0	0.0	0.0	0.03	0.0	0.0	0.0	0.09													
22	0.0	0.24	0.0	0.0	0.0	0.0	0.0	0.13	4.76	0.41	0.0	0.0													
23	0.0	0.04	0.0	0.0	0.0	0.0	0.0	0.0	0.07	0.01	0.0	0.0													
24	0.0	0.09	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0													
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0													
26	0.0	0.0	0.0	0.04	0.0	0.0	0.0	0.0	0.04	0.0	0.0	0.0													
27	0.0	0.13	0.0	0.0	0.17	0.0	0.01	0.0	0.0	0.0	0.0	0.0													
28	0.0	0.16	0.60	0.0	0.0	0.0	0.16	0.0	0.0	0.0	0.0	0.0													
29	0.0	0.0	0.0	0.42	1.27	0.0	0.0	0.0	0.0	0.0	0.0	0.0													
30	0.0	0.0	0.0	0.90	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0													
31	0.0	0.0	0.01	0.05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0													
TOTAL	0.14	0.66	2.30	2.37	3.20	1.21	0.99	2.02	7.07	2.85	1.05	0.30													
STA AV	0.92	1.16	2.14	2.96	4.36	2.40	2.78	2.57	4.29	1.89	1.34	0.91													

NOTES: Precipitation obtained from Thiessen weighted rainfall values from two gages, Nos. 197 and 198. STA AV based on 5 yr (1966-70) record period.

1970 SELECTED RUNOFF EVENT			CHICKASHA, OKLAHOMA WATERSHED R-8								
ANTECEDENT CONDITIONS			RAINFALL			RUNOFF					
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.	
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)	
EVENT OF SEPTEMBER 22 - 23, 1970											
RG 000198			RG 000198								
9-22	0.0	0.0	9-22	1215	0.0	0.0	9-22	1217	0.0	0.0	
				1232	0.6353	0.18		1246	10.556	0.0920	
				1245	2.4000	0.70		1300	17.057	0.2085	
				1259	1.9286	1.15		1313	9.167	0.3099	
				1350	0.2471	1.36		1321	5.056	0.3439	
WATERSHED CONDITIONS:				1449	0.0102	1.37		1402	0.444	0.4116	
100% rangeland, formerly				1459	2.5200	1.79		1449	0.056	0.4187	
cultivated but returned to				1535	0.1000	1.85		1503	6.028	0.4439	
range use during the 1930-				1620	0.0133	1.86		1506	9.612	0.4582	
40 period after severe				1635	0.1600	1.90		1512	9.389	0.4929	
erosion. Grass cover pri-											
marily annual three-awn				1643	1.6500	2.12		1519	6.362	0.5261	
and little bluestem with a				1711	0.1714	2.20		1610	0.250	0.6270	
large percent of bare				1736	0.9600	2.60		1632	0.139	0.6296	
ground between bluestem				1757	0.8286	2.89		1641	0.722	0.6319	
bunches. Area subjected to				1905	0.1059	3.01		1700	3.417	0.6558	
continuous grazing. Range											
condition class was poor.				2005	0.1400	3.15		1710	2.834	0.6742	
30 Day Antecedent Conditions:				2035	0.1000	3.20		1728	6.917	0.7270	
Rainfall Runoff				2127	0.2885	3.45		1734	11.028	0.7598	
Date	(inches)	(inches)		2150	0.6783	3.71		1741	12.584	0.8080	
08-18	1.03	0.005		2305	0.2080	3.97		1746	15.168	0.8509	
08-19	0.83	0.036									
08-21	0.02	0.000	9-23	15	0.1971	4.20		1754	13.140	0.9185	
08-22	0.13	0.000						1900	0.778	1.1945	
09-02	0.05	0.000						2014	0.444	1.2216	
09-07	0.03	0.000						2038	0.361	1.2274	
09-11	0.08	0.000						2110	1.500	1.2452	
09-13	0.51	0.000									
09-14	0.77	0.030						2142	6.362	1.3209	
09-16	0.32	0.000						2232	2.139	1.4482	
09-17	0.44	0.003						2400	1.889	1.5547	
09-22	0.70	0.007					9-23	105	0.361	1.5985	
								140	0.139	1.6038	

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.03600. Antecedent precipitation amounts are from Thiessen weighted rainfall using rain gages 197 and 198.



EVENT OF SEPTEMBER 22 - 23, 1970
CHICKASHA, OKLAHOMA WATERSHED R-8

SONORA, TEXAS WATERSHED W-14

LOCATION: Sutton County, Texas; gaging station on Water Street at Sonora city limit; Lowery Draw, East Fork Devils River, Devils River, Rio Grande River Basin.

AREA: 30720.00 acres 48.00 sq. miles

MONTHLY PRECIPITATION AND RUNOFF (inches)														SONORA, TEXAS WATERSHED W-14													
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual													
1970	P	0.31	2.00	1.24	1.55	2.45	2.61	0.01	2.25	2.90	1.04	0.0	0.0	16.35													
	Q	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0													
STA AV	P	0.76	1.30	0.96	2.65	3.08	1.64	1.43	1.49	3.94	1.83	1.48	0.76	21.27													
	Q	0.0	0.0	0.0	0.0	0.013	0.0	0.0	0.0	0.093	0.008	0.0	0.0	0.115													
ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																											
		Maximum Discharge Date	Rate	1 Hour Date	Vol.	2 Hours Date	Vol.	Maximum Volume for Selected Time Interval Date	Vol.	1 Day Date	Vol.	2 Days Date	Vol.	5 Days Date	Vol.												
1970		0-0	0.0	0-0	0.0	0-0	0.0	0-0	0.0	0-0	0.0	0-0	0.0	0-0	0.0												
MAXIMUMS FOR PERIOD OF RECORD																											
		9-23 1964	0.060	9-23 1964	0.060	9-23 1964	0.120	9-23 1964	0.220	9-23 1964	0.270	9-23 1964	0.380	9-23 1964	0.610												

NOTES: Watershed conditions: 0.4% caliche and paved roads; 0.3% urban area; 0.3% cropland; 99.0% rangeland. Cropland seeded to oats in fall for winter grazing. Rangeland moderately to severely overgrazed during the year depending on climatic conditions and stocking rates. For map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1967, USDA Misc. Pub. 1262, p. 70.1-7. Precipitation data by Thiessen method using rain gages 1, 1-A, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, and 13. Precipitation and runoff records began May 1961; part-year amounts not included in averages. No runoff occurred during 1970. For long-time precipitation records, see National Weather Service records at Texas Agricultural Experiment Station, Substation No. 14, 18 miles south of Sonora, Texas.

1970 DAILY AIR TEMPERATURE (degrees F)														SONORA, TEXAS WATERSHED W-14													
Day		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec														
		max min	max min	max min	max min	max min	max min	max min	max min	max min	max min	max min	max min														
1		54 26	68 32	72 55	76 50	73 44	89 61	89 64	97 70	86 68	79 59	76 42	79 50														
2		51 32	59 34	73 58	67 25	67 46	77 49	89 68	97 70	89 69	79 58	59 35	77 49														
3		47 25	54 17	72 52	70 36	72 41	80 46	90 63	96 70	92 72	81 56	58 30	75 57														
4		47 26	60 34	68 49	69 43	78 44	80 47	95 61	94 71	92 73	79 59	57 31	75 45														
5		49 38	59 39	68 39	68 30	79 45	85 51	95 64	93 70	92 69	81 64	64 30	74 49														
6		33 17	67 45	67 49	75 34	78 48	86 58	95 62	94 68	91 72	85 66	74 37	69 30														
7		39 9	65 47	57 42	75 40	79 55	87 58	95 68	96 70	91 72	87 67	81 42	66 37														
8		44 19	63 46	66 30	79 54	87 59	85 59	92 68	97 69	92 68	86 51	80 55	69 50														
9		43 29	59 33	76 43	78 59	88 61	84 66	93 68	101 70	92 67	86 37	74 38	73 47														
10		50 34	59 30	75 35	73 51	89 65	86 68	93 64	101 69	92 64	71 43	72 40	71 53														
11		62 32	72 38	37 30	83 50	90 69	95 72	93 67	100 72	92 67	81 58	69 39	66 35														
12		65 29	71 34	44 27	82 51	84 68	96 73	95 67	97 68	90 67	81 52	68 35	58 27														
13		63 33	72 45	59 21	81 50	85 68	92 71	95 69	99 67	89 71	81 48	67 51	57 42														
14		46 36	72 50	68 32	73 55	80 60	92 73	90 66	99 72	86 70	80 55	51 39	52 35														
15		50 33	72 43	71 39	82 62	67 53	93 71	87 63	93 68	86 69	77 55	54 26	68 47														
16		58 41	63 28	70 53	83 61	76 45	97 68	89 66	95 70	90 65	56 46	65 30	65 37														
17		63 34	72 33	70 34	82 64	82 50	95 65	91 63	95 69	90 68	58 48	73 38	69 36														
18		61 23	83 38	71 48	77 61	82 52	93 64	93 67	99 72	87 68	58 48	70 37	73 49														
19		53 21	83 36	67 39	75 53	83 54	93 65	95 66	98 71	88 66	65 49	72 42	71 47														
20		65 29	43 37	46 34	85 51	85 59	92 56	96 67	97 73	89 68	73 47	71 37	58 43														
21		75 27	51 35	54 29	85 49	83 56	92 64	96 65	96 74	89 69	74 55	71 47	72 57														
22		46 30	50 42	67 34	86 64	82 62	85 64	92 68	99 74	87 73	80 58	73 46	76 55														
23		69 35	55 49	70 37	85 69	83 63	86 66	90 67	99 68	87 53	79 65	60 24	75 41														
24		68 38	60 50	75 45	77 61	81 58	90 69	92 69	91 65	81 58	80 43	48 20	64 23														
25		77 32	53 42	75 45	80 63	83 62	96 67	92 64	94 65	84 68	83 54	65 35	62 35														
26		76 42	61 50	60 29	86 60	84 66	97 69	93 68	94 63	84 51	83 63	75 43	62 27														
27		72 44	58 42	63 37	89 68	87 58	97 65	94 71	95 62	54 50	81 57	74 48	70 37														
28		78 56	65 51	62 34	90 68	87 56	87 63	93 72	93 60	60 48	63 34	72 51	75 46														
29		77 38		65 28	91 65	85 68	85 69	93 70	92 62	76 55	65 32	69 53	72 47														
30		66 20		75 45	77 49	87 67	88 72	95 70	89 67	79 55	72 36	72 53	69 43														
31		59 33		77 51		87 59		97 71	86 66		78 42		65 30														
AV		58 31	63 39	66 39	79 53	82 57	89 64	93 67	96 69	86 65	76 52	68 39	69 42														
MEAN		44.7	51.3	52.7	66.3	69.3	76.5	79.7	82.2	75.5	63.7	53.5	55.4														
STA AV		59 32	60 35	69 42	79 53	83 59	89 65	93 67	93 67	85 62	78 52	69 43	61 35														

NOTES: Temperature data taken daily with maximum and minimum thermometers. Readings were taken at 1630 of the day shown. STA AV based on 7 yr record period.

1970 DAILY PRECIPITATION (inches) SONORA, TEXAS WATERSHED W-14												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.0	0.25	0.0	0.0	0.0	0.01E	0.0	0.0	0.01E	0.0	0.0	0.0
2	0.0	0.0	0.02E	0.0	0.0	0.0	0.0	0.0	0.0	0.09E	0.0	0.0
3	0.0	0.0	0.01E	0.0	0.0	0.0	0.01E	0.0	0.0	0.0	0.0	0.0
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.14E	0.0	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.18E	0.0	0.0
6	0.0	0.01E	0.32E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7	0.0	0.0	0.09E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8	0.0	0.0	0.0	0.0	0.0	0.03E	0.0	0.0	0.0	0.0	0.0	0.0
9	0.0	0.0	0.0	0.13E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11	0.0	0.0	0.06E	0.0	0.0	0.0	0.0	0.0	0.0	0.11E	0.0	0.0
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.09E	0.0	0.0	0.0
13	0.13E	0.0	0.0	0.0	0.42	0.0	0.0	0.0	0.33E	0.0	0.0	0.0
14	0.0	0.0	0.0	0.0	0.88	0.0	0.0	0.03E	0.17E	0.0	0.0	0.0
15	0.06E	0.0	0.0	0.0	0.26	0.0	0.0	0.02E	0.0	0.0	0.0	0.0
16	0.0	0.0	0.13E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E	0.0	0.0	0.0
18	0.0 S	0.0	0.0	0.18E	0.0	0.0	0.0	0.0	0.01E	0.54	0.0	0.0
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.43E	0.0	0.0	0.0	0.0
20	0.0	0.0	0.55	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.07E	0.0	0.0	1.19	0.0	0.0	0.0	0.0	0.0	0.0
22	0.06E	0.62	0.0	0.0	0.03E	1.30	0.0	1.01	0.38E	0.0	0.0	0.0
23	0.0	0.18E	0.0	0.0	0.51E	0.0	0.0	0.0	0.00	0.11E	0.0	0.0
24	0.0	0.85	0.0	0.0	0.04E	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.20	0.0	0.0	0.0
26	0.0	0.0	0.0	0.07E	0.07E	0.0	0.0	0.0	1.60	0.01E	0.0	0.0
27	0.0	0.08E	0.0	0.0	0.10E	0.0	0.0	0.0	0.11E	0.0	0.0	0.0
28	0.0	0.0	0.0	0.0	0.05E	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	0.0	0.0	0.0	0.0	0.0	0.07E	0.0	0.00E	0.0	0.0	0.0	0.0
30	0.0	0.0	0.0	1.17	0.08E	0.0	0.0	0.58E	0.0	0.0	0.0	0.0
31	0.06	0.0	0.0	0.0	0.0	0.0	0.0	0.03E	0.0	0.0	0.0	0.0
TOTAL	0.31	2.00	1.24	1.55	2.45	2.61	0.01	2.25	2.90	1.04	0.0	0.0
STA AV	0.76	1.30	0.96	2.65	3.08	1.64	1.43	1.49	3.94	1.83	1.44	0.76

NOTES: Precipitation values are Thiessen weighted average of rain gages 1, 1-A, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, and 13. Records began May 1961; part-year amounts not included in averages. STA AV based on 9 yr period. Estimate codes may indicate that non-significant event totals are included.

SONORA, TEXAS WATERSHED S-9

LOCATION: Sutton County, Texas; gaging station on Water Street at Sonora city limit; Lowrey Draw, East Fork Devils River, Devils River, Rio Grande River Basin.

AREA: 1774.00 acres 2.77 sq. miles

MONTHLY PRECIPITATION AND RUNOFF (inches)										SONORA, TEXAS WATERSHED S-9							
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual			
1970	P	0.28	2.01	1.37	1.72	4.10	3.66	0.0	2.43	3.10	0.90	0.0	0.0	19.55			
	Q	0.0	0.000	0.0	0.0	0.004	0.040	0.0	0.001	0.0	0.0	0.0	0.0	0.045			
STA AV	P	0.75	1.30	1.00	2.39	3.02	1.84	1.35	1.35	4.16	1.75	1.27	0.79	20.96			
	Q	0.0	0.000	0.001	0.001	0.008	0.018	0.0	0.000	0.300	0.002	0.0	0.004	0.333			
ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																	
		Maximum Discharge		1 Hour		2 Hours		Maximum Volume for Selected Time Interval		12 Hours		1 Day		2 Days		8 Days	
		Date	Rate	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.
1970		6-22	0.027	6-22	0.014	6-22	0.017	6-22	0.021	6-22	0.039	6-21	0.039	6-21	0.040	6-21	0.040
MAXIMUMS FOR PERIOD OF RECORD																	
		9-23	1.190	9-23	0.570	9-23	0.800	9-23	1.040	9-23	1.070	9-23	1.270	9-22	1.450	9-19	2.680
		1964		1964		1964		1964		1964		1964		1964		1964	

NOTES: Watershed conditions: 0.3% caliche roads; 99.7% rangeland. Rangeland fair condition to moderately overgrazed during a year depending on climatic conditions and stocking rates. For map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1967, USDA Misc. Pub. 1262, p. 70.2-5. Precipitation data by Thiessen method using rain gages 1 and 1-A. Precipitation and runoff records began May 1961; part-year amounts not included in averages. For long-time precipitation records, see National Weather Service records at Texas Agricultural Experiment Station, Substation No. 14, 18 miles south of Sonora, Texas.

1970		DAILY PRECIPITATION (inches)					SONORA, TEXAS WATERSHED S-9						
	Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
	1	0.0	0.24	0.0	0.0	0.0	0.10E	0.0	0.0	0.0	0.0	0.0	0.0
	2	0.0	0.0	0.10E	0.0	0.0	0.0	0.0	0.0	0.0	0.10E	0.0	0.0
	3	0.0	0.0	0.03E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.12E	0.0	0.0	0.0	0.0
	5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.28E	0.0	0.0
	6	0.0	0.05E	0.31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	7	0.0	0.0	0.09E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	8	0.0	0.0	0.0	0.0	0.0	0.04E	0.0	0.0	0.0	0.0	0.0	0.0
	9	0.0	0.0	0.0	0.10E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	11	0.0	0.0	0.10E	0.0	0.0	0.0	0.0	0.0	0.0	0.02E	0.0	0.0
	12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.13E	0.0	0.0	0.0
	13	0.09E	0.0	0.0	0.0	0.19	0.0	0.0	0.0	0.46	0.0	0.0	0.0
	14	0.0	0.0	0.0	0.0	2.08	0.0	0.0	0.0	0.20	0.0	0.0	0.0
	15	0.07E	0.0	0.0	0.0	0.45	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	16	0.0	0.0	0.15E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	18	0.0 S	0.0	0.0	0.22E	0.0	0.0	0.0	0.0	0.0	0.47	0.0	0.0
	19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.62	0.0	0.0	0.0	0.0
	20	0.0	0.0	0.52	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	21	0.0	0.0	0.07E	0.0	0.0	1.81	0.0	0.0	0.0	0.0	0.0	0.0
	22	0.05E	0.58	0.0	0.0	0.0	1.69	0.0	1.28	0.51	0.0	0.0	0.0
	23	0.0	0.20	0.0	0.0	0.93	0.0	0.0	0.0	0.0	0.04E	0.0	0.0
	24	0.0	0.85	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.18	0.0	0.0	0.0
	26	0.0	0.0	0.0	0.07E	0.20E	0.0	0.0	0.0	1.58	0.0	0.0	0.0
	27	0.0	0.09E	0.0	0.0	0.11E	0.0	0.0	0.0	0.05E	0.0	0.0	0.0
	28	0.0	0.0	0.0	0.0	0.06E	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	29	0.0		0.0	0.0	0.0	0.02E	0.0	0.01E	0.0	0.0	0.0	0.0
	30	0.0		0.0	1.34	0.07E	0.0	0.0	0.38E	0.0	0.0	0.0	0.0
	31	0.07		0.0		0.0		0.0	0.02E		0.0		0.0
TOTAL		0.28	2.01	1.37	1.72	4.10	3.66	0.0	2.43	3.10	0.90	0.0	0.0
STA AV		0.75	1.30	1.00	2.39	3.02	1.84	1.35	1.35	4.16	1.75	1.27	0.79

NOTES: For daily air temperature, in the vicinity, see table for Watershed W-14 (70.001). Precipitation values are Thiessen weighted average of rain gages 1 and 1-A. Records began May 1961; part-year amounts not included in averages. STA AV based on 9 yr record period. Estimate codes may indicate that non-significant event totals are included.

1970 MEAN DAILY DISCHARGE (cfs) SONORA, TEXAS WATERSHED S-9												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	0.0	0.0	0.0	0.0	0.259	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.045	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	0.062	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.0	0.0	2.911	0.0	0.042	0.0	0.0	0.0	0.0
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	0.0	0.019	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MEAN	0.0	0.0007	0.0	0.0	0.0098	0.0991	0.0	0.0014	0.0	0.0	0.0	0.0
INCHES	0.0	0.000	0.0	0.0	0.004	0.040	0.0	0.001	0.0	0.0	0.0	0.0
STA AV	0.0	0.000	0.001	0.001	0.008	0.018	0.0	0.000	0.300	0.002	0.0	0.004

NOTES: To convert mean daily discharge in CFS to IN/DAY, multiply by 0.013417. Records began May 1961; part-year amounts not included in averages. STA AV based on 9 yr record period.

SONORA, TEXAS WATERSHED S-10

LOCATION: Sutton County, Texas; gaging station on flood detention reservoir, 6 mi. NE of Sonora; Lowrey Draw, East Fork Devils River, Devils River, Rio Grande River Basin.

AREA: 5392.00 acres 8.42 sq. miles

MONTHLY PRECIPITATION AND RUNOFF (inches)															SONORA, TEXAS WATERSHED S-10														
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual															
1970	P	0.28	2.14	1.21	1.47	3.13	3.22	0.04	2.08	2.84	0.92	0.0	0.0	17.33															
	Q	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0															
STA AV	P	0.76	1.29	0.96	2.50	3.00	1.83	1.23	1.41	3.95	1.08	1.40	0.76	20.78															
	Q	0.0	0.0	0.0	0.0	0.028	0.013	0.0	0.0	0.213	0.012	0.0	0.006	0.272															
ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																													
		Maximum Discharge		1 Hour		2 Hours		Maximum Volume for Selected Time Interval		6 Hours		12 Hours		1 Day		2 Days		6 Days											
		Date	Rate	Date	Vcl.	Date	Vcl.	Date	Vcl.	Date	Vcl.	Date	Vcl.	Date	Vcl.	Date	Vcl.	Date	Vcl.										
1970		0- 0	0.0	0- 0	0.0	0- 0	0.0	0- 0	0.0	0- 0	0.0	0- 0	0.0	0- 0	0.0	0- 0	0.0	0- 0	0.0										
MAXIMUMS FOR PERIOD OF RECORD																													
		9-23	0.810	9-23	0.720	9-23	0.950	3-23	1.110	9-23	1.150	9-23	1.230	9-23	1.520	9-19	1.930												
		1964		1964		1964		1964		1964		1964		1964		1964													

NOTES: Watershed conditions: Caliche roads - 0.4%; rangeland - 99.6%. Range condition poor to fair, with moderate to severe overgrazing during a year depending on climatic conditions and stocking rates. For map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1967, USDA Misc. Pub. 1262, p. 70.3-b. Thiessen weighted rainfall using rain gages 1, 1-A, 2, 4, 5, 6, and 7. Precipitation and runoff records began May 1961; part-year amounts not included in averages. No runoff occurred during 1970. For long-time precipitation records, see National Weather Service records at Texas Agricultural Experiment Station, Substation No. 14, 18 miles south of Sonora, Texas.

1970 DAILY PRECIPITATION (inches)													SONORA, TEXAS WATERSHED S-10												
	Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec												
1	0.0	0.25	0.0	0.0	0.0	0.0	0.02E	0.0	0.0	0.0	0.0	0.0	0.0												
2	0.0	0.0	0.02E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.09E	0.0	0.0												
3	0.0	0.0	0.00E	0.0	0.0	0.0	0.0	0.04E	0.0	0.0	0.0	0.0	0.0												
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.13E	0.0	0.0	0.0	0.0												
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.10E	0.0	0.0												
6	0.0	0.06E	0.28E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0												
7	0.0	0.0	0.10E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0												
8	0.0	0.0	0.0	0.0	0.0	0.0	0.03E	0.0	0.0	0.0	0.0	0.0	0.0												
9	0.0	0.0	0.0	0.11E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0												
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0												
11	0.0	0.0	0.07E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.04E	0.0	0.0												
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.11E	0.0	0.0	0.0												
13	0.12E	0.0	0.0	0.0	0.0	0.29	0.0	0.0	0.0	0.32E	0.0	0.0	0.0												
14	0.0	0.0	0.0	0.0	0.0	1.54	0.0	0.0	0.00E	0.13E	0.0	0.0	0.0												
15	0.05E	0.0	0.0	0.0	0.0	0.43	0.0	0.0	0.0	0.0	0.0	0.0	0.0												
16	0.0	0.0	0.14E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0												
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0												
18	0.0 S	0.0	0.0	0.0	0.30E	0.0	0.0	0.0	0.0	0.0	0.59	0.0	0.0												
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.41	0.0	0.0	0.0	0.0												
20	0.0	0.0	0.52	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0												
21	0.0	0.0	0.08E	0.0	0.0	0.0	1.43	0.0	0.0	0.0	0.0	0.0	0.0												
22	0.05E	0.55	0.0	0.0	0.0	0.02E	1.71	0.0	0.99	0.33	0.0	0.0	0.0												
23	0.0	0.13	0.0	0.0	0.0	0.52	0.0	0.0	0.0	0.0	0.11E	0.0	0.0												
24	0.0	1.02	0.0	0.0	0.0	0.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0												
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.23	0.0	0.0	0.0												
26	0.0	0.0	0.0	0.0	0.07E	0.10E	0.0	0.0	0.0	1.52	0.0	0.0	0.0												
27	0.0	0.07E	0.0	0.0	0.0	0.11E	0.0	0.0	0.0	0.13E	0.0	0.0	0.0												
28	0.0	0.0	0.0	0.0	0.0	0.05E	0.0	0.0	0.0	0.0	0.0	0.0	0.0												
29	0.0	0.0	0.0	0.0	0.0	0.0	0.03E	0.0	0.0	0.00E	0.0	0.0	0.0												
30	0.0	0.0	0.0	0.98	0.08E	0.0	0.0	0.0	0.51E	0.0	0.0	0.0	0.0												
31	0.07		0.0			0.0		0.0	0.03E		0.0		0.0												
TOTAL		0.28	2.14	1.21	1.47	3.13	3.22	0.04	2.08	2.84	0.92	0.0	0.0												
STA AV		0.76	1.29	0.96	2.50	3.00	1.83	1.23	1.41	3.95	1.08	1.40	0.76												

NOTES: For daily air temperatures, in the vicinity, see table for Watershed W-14, p. 70.001. Precipitation values are Thiessen weighted average of rain gages 1, 1-A, 2, 4, 5, 6, and 7. Records began May 1961; part-year amounts not included in averages. STA AV based on 9 yr record period. Estimate codes may indicate that non-significant event totals are included.

SONORA, TEXAS WATERSHED S-11

LOCATION: Sutton County, Texas; gaging station on flood detention reservoir, 4 mi. NE of Sonora; Lowrey Draw, East Fork Devils River, Devils River, Rio Grande River Basin.

AREA: 10767.00 acres 16.85 sq. miles

MONTHLY PRECIPITATION AND RUNOFF (inches)														SONORA, TEXAS WATERSHED S-11											
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual											
1970	P	0.29	2.02	1.22	1.54	2.87	2.89	0.0	2.03	2.53	0.96	0.0	0.0	16.35											
	Q	0.0	0.0	0.0	0.001	0.0	0.030	0.0	0.0	0.0	0.0	0.0	0.0	0.032											
STA AV	P	0.78	1.28	0.92	2.69	3.26	1.74	1.55	1.48	3.90	1.65	1.40	0.77	21.40											
	Q	0.0	0.0	0.0	0.022	0.108	0.010	0.0	0.0	0.148	0.049	0.001	0.009	0.347											
ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																									
		Maximum Discharge		1 Hour		2 Hours		Maximum Volume for Selected Time Interval								2 Days		8 Days							
		Date	Rate	Date	Vol.	Date	Vol.	Date	6 Hours	Date	12 Hours	Date	1 Day	Date	Vol.	Date	Vol.								
1970		6-22	0.023	6-22	0.014	6-22	0.020	6-22	0.028	6-22	0.028	6-21	0.028	6-21	0.030	6-21	0.030								
MAXIMUMS FOR PERIOD OF RECORD																									
		9-23	0.390	9-23	0.310	9-23	0.550	9-23	0.770	9-23	0.780	9-23	0.780	9-23	0.910	9-19	1.250								
		1964		1964		1964		1964		1964		1964		1964		1964									

NOTES: Watershed conditions: Caliche roads - 0.4%; rangeland - 99.6%. Range condition poor to fair; moderately to severely overgrazed during a year depending on climatic conditions and stocking rates. For map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1967, USDA Misc. Pub. 1262, p. 70.4-8. Precipitation and runoff records began May 1961; part-year amounts not included in averages. For long-time precipitation records, see National Weather Service records at the Texas Agricultural Experiment Station, Substation No. 14, 18 miles south of Sonora, Texas.

1970 DAILY PRECIPITATION (inches)														SONORA, TEXAS WATERSHED S-11											
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec													
1	0.0	0.27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0												
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.08E	0.0	0.0													
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0												
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.19E	0.0	0.0	0.0	0.0	0.0												
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.12E	0.0	0.0	0.0												
6	0.0	0.0	0.27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0												
7	0.0	0.0	0.10E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0												
8	0.0	0.0	0.0	0.0	0.0	0.04E	0.0	0.0	0.0	0.0	0.0	0.0	0.0												
9	0.0	0.0	0.0	0.13E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0												
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0												
11	0.0	0.0	0.08E	0.0	0.0	0.0	0.0	0.0	0.0	0.05E	0.0	0.0	0.0												
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.10E	0.0	0.0	0.0	0.0												
13	0.12E	0.0	0.0	0.0	0.38	0.0	0.0	0.0	0.15E	0.0	0.0	0.0	0.0												
14	0.0	0.0	0.0	0.0	1.28	0.0	0.0	0.0	0.11E	0.0	0.0	0.0	0.0												
15	0.04E	0.0	0.0	0.0	0.45	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0												
16	0.0	0.0	0.14E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0												
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0												
18	0.0 S	0.0	0.0	0.36	0.0	0.0	0.0	0.0	0.0	0.63	0.0	0.0	0.0												
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.33	0.0	0.0	0.0	0.0	0.0												
20	0.0	0.0	0.54	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0												
21	0.0	0.0	0.09E	0.0	0.0	0.78	0.0	0.0	0.0	0.0	0.0	0.0	0.0												
22	0.06E	0.51	0.0	0.0	0.0	2.05	0.0	1.03	0.29	0.0	0.0	0.0	0.0												
23	0.0	0.18	0.0	0.0	0.39	0.0	0.0	0.0	0.0	0.08E	0.0	0.0	0.0												
24	0.0	0.99	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0												
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.32	0.0	0.0	0.0	0.0												
26	0.0	0.0	0.0	0.10E	0.13E	0.0	0.0	0.0	1.45	0.0	0.0	0.0	0.0												
27	0.0	0.07E	0.0	0.0	0.12E	0.0	0.0	0.0	0.11E	0.0	0.0	0.0	0.0												
28	0.0	0.0	0.0	0.0	0.06E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0												
29	0.0	0.0	0.0	0.0	0.0	0.02E	0.0	0.0	0.0	0.0	0.0	0.0	0.0												
30	0.0	0.0	0.0	0.95	0.06E	0.0	0.0	0.48	0.0	0.0	0.0	0.0	0.0												
31	0.07		0.0		0.0		0.0	0.0		0.0		0.0	0.0												
TOTAL	0.29	2.02	1.22	1.54	2.87	2.89	0.0	2.03	2.53	0.96	0.0	0.0	0.0												
STA AV	0.78	1.28	0.92	2.69	3.26	1.74	1.55	1.48	3.90	1.65	1.40	0.77													

NOTES: For daily air temperatures, in the vicinity, see table for Watershed W-14, p. 70.001. Precipitation values are Thiessen weighted average of rain gages 5, 6, 7, 8, 9, 10, and 11. Records began May 1961; part-year amounts not included in averages. STA AV based on 9 yr record period. Estimate codes may indicate that non-significant event totals are included.

SONORA, TEXAS WATERSHED S-11												
1970	MEAN DAILY DISCHARGE (cfs)											
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	0.857	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.0	0.0	12.863	0.0	0.0	0.0	0.0	0.0	0.0
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	0.0	0.0	0.0	0.623	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MEAN	0.0	0.0	0.0	0.0208	0.0	0.4573	0.0	0.0	0.0	0.0	0.0	0.0
INCHES	0.0	0.0	0.0	0.001	0.0	0.030	0.0	0.0	0.0	0.0	0.0	0.0
STA AV	0.0	0.0	0.0	0.022	0.108	0.010	0.0	0.0	0.148	0.049	0.001	0.009

NOTES: To convert mean daily discharge in CFS to IN/DAY, multiply by 0.002206. Records began May 1961; part-year amounts not included in averages. STA AV based on 9 yr record period.

SONORA, TEXAS WATERSHED S-12

LOCATION: Sutton County, Texas; gaging station on flood detention reservoir, 2 mi. NE of Sonora; Lowrey Draw, East Fork Devils River, Devils River, Rio Grande River Basin.

AREA: 2801.00 acres 4.38 sq. miles

MONTHLY PRECIPITATION AND RUNOFF (inches)													SONORA, TEXAS WATERSHED S-12															
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual														
1970	P	0.32	1.70	1.15	1.45	1.67	1.99	0.0	2.05	2.57	1.15	0.0	0.0	14.07														
	Q	0.0	0.0	0.0	0.0	0.0	0.012	0.0	0.0	0.0	0.0	0.0	0.0	0.012														
STA AV	P	0.74	1.26	0.88	2.82	3.20	1.41	1.69	1.45	3.72	1.87	1.39	0.72	21.14														
	Q	0.0	0.0	0.0	0.065	0.211	0.001	0.013	0.0	0.180	0.092	0.0	0.029	0.592														
ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																												
Maximum Discharge Date Rate1 Hour Date Vol.2 Hours Date Vol. Maximum Volume for Selected Time Interval6 Hours Date Vol.12 Hours Date Vol.1 Day Date Vol.2 Days Date Vol.8 Days Date Vol.																												
1970	6-22 0.0176-22 0.0056-22 0.0066-22 0.0116-22 0.0126-22 0.0126-22 0.0126-22 0.0126-22 0.012																											
MAXIMUMS FOR PERIOD OF RECORD																												
9-23 1.2009-23 0.7909-23 1.0009-23 1.0809-23 1.0909-23 1.0909-23 1.0909-23 1.1509-19 1.620																												
19641964196419641964196419641964196419641964196419641964																												

NOTES: Watershed conditions: Paved roads - 0.2% of the area; rangeland - 99.8%. Range conditions poor to fair, with moderate to severe overgrazing during a year depending on climatic conditions and stocking rates. For map of watershed see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1967, USDA Misc. Pub. 1262, p. 70.5-7. Thiessen weighted rainfall using rain gages 8, 10, 11, 12, and 13. Precipitation and runoff records began May 1961; part-year amounts not included in averages. For long-time precipitation records, see National Weather Service records at the Texas Agricultural Experiment Station, Substation No. 14, approximately 18 miles south of Sonora, Texas.

1970 DAILY PRECIPITATION (inches)													SONORA, TEXAS WATERSHED S-12												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec													
1	0.0	0.26	0.0	0.0	0.0	0.0	0.0	0.0	0.03E	0.0	0.0	0.0													
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.07E	0.0	0.0													
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0													
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.12E	0.0	0.0	0.0	0.0													
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.16E	0.0	0.0													
6	0.0	0.0	0.32E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0													
7	0.0	0.0	0.10E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0													
8	0.0	0.0	0.0	0.0	0.0	0.04E	0.0	0.0	0.0	0.0	0.0	0.0													
9	0.0	0.0	0.0	0.12E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0													
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0													
11	0.0	0.0	0.04E	0.0	0.0	0.0	0.0	0.0	0.0	0.26E	0.0	0.0													
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.03E	0.0	0.0	0.0													
13	0.14E	0.0	0.0	0.0	0.47	0.0	0.0	0.0	0.31	0.0	0.0	0.0													
14	0.0	0.0	0.0	0.0	0.23	0.0	0.0	0.0	0.17	0.0	0.0	0.0													
15	0.05E	0.0	0.0	0.0	0.09	0.0	0.0	0.0	0.0	0.0	0.0	0.0													
16	0.0	0.0	0.10E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0													
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.02E	0.0	0.0	0.0													
18	0.0 S	0.0	0.0	0.21E	0.0	0.0	0.0	0.0	0.03E	0.51	0.0	0.0													
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.29E	0.0	0.0	0.0	0.0													
20	0.0	0.0	0.53	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0													
21	0.0	0.0	0.06E	0.0	0.0	1.00	0.0	0.0	0.0	0.0	0.0	0.0													
22	0.07E	0.59	0.0	0.0	0.0	0.85	0.0	1.08	0.37E	0.0	0.0	0.0													
23	0.0	0.14	0.0	0.0	0.56	0.0	0.0	0.0	0.01	0.12E	0.0	0.0													
24	0.0	0.63	0.0	0.0	0.08E	0.0	0.0	0.0	0.0	0.0	0.0	0.0													
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.12	0.0	0.0	0.0													
26	0.0	0.0	0.0	0.05E	0.03E	0.0	0.0	0.0	1.44	0.03E	0.0	0.0													
27	0.0	0.09E	0.0	0.0	0.09E	0.0	0.0	0.0	0.06E	0.0	0.0	0.0													
28	0.0	0.0	0.0	0.0	0.05E	0.0	0.0	0.0	0.0	0.0	0.0	0.0													
29	0.0	0.0	0.0	0.0	0.0	0.10E	0.0	0.0	0.0	0.0	0.0	0.0													
30	0.0	0.0	1.08	0.08E	0.0	0.0	0.0	0.56	0.0	0.0	0.0	0.0													
31	0.06		0.0		0.0		0.0	0.00E																	
TOTAL	0.32	1.70	1.15	1.45	1.67	1.99	0.0	2.05	2.57	1.15	0.0	0.0													
STA AV	0.74	1.26	0.88	2.82	3.20	1.41	1.69	1.45	3.72	1.87	1.39	0.72													

NOTES: For daily air temperature, in the vicinity, see table for Watershed W-14, p. 70.001. Precipitation values are Thiessen weighted average of rain gages 8, 10, 11, 12, and 13. Records began May 1961, part-year amounts not included in averages. STA AV based on 9 yr record period. Estimate codes may indicate that non-significant event totals are included.

SONGBA, TEXAS WATERSHED S-12												
1970 MEAN DAILY DISCHARGE (cfs)												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.0	0.0	1.266	0.0	0.0	0.0	0.0	0.0	0.0
23	0.0	0.0	0.0	0.0	0.0	0.106	0.0	0.0	0.0	0.0	0.0	0.0
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MEAN	0.0	0.0	0.0	0.0	0.0	0.0457	0.0	0.0	0.0	0.0	0.0	0.0
INCHES	0.0	0.0	0.0	0.0	0.0	0.012	0.0	0.0	0.0	0.0	0.0	0.0
STA AV	0.0	0.0	0.0	0.065	0.211	0.091	0.013	0.0	0.180	0.092	0.0	0.029

NOTES: To convert mean daily discharge in CFS to IN/DAY, multiply by 0.008498. Records began May 1961; part-year amounts not included in averages. STA AV based on 9 yr record period.

SONORA, TEXAS WATERSHED S-13

LOCATION: Sutton County, Texas; gaging station on flood detention reservoir, 0.5 mi. SE of Sonora; Lowrey Draw, East Fork Devils River, Devils River, Rio Grande River Basin.

AREA: 686.00 acres 1.07 sq. miles

MONTHLY PRECIPITATION AND RUNOFF (inches)														SONORA, TEXAS WATERSHED S-13														
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual														
1970	P	0.35	1.57	1.08	1.40	1.47	1.74	0.0	0.95	2.75	1.52	0.0	0.0	12.82														
	Q	0.0	0.0	0.0	0.000	0.0	0.000	0.0	0.0	0.001	0.0	0.0	0.0	0.001														
STA AV	P	0.80	1.34	0.89	2.81	2.98	1.41	1.37	1.24	3.43	1.88	1.40	0.73	20.29														
	Q	0.0	0.0	0.301	0.081	0.083	0.000	0.001	0.0	0.107	0.071	0.0	0.308	0.351														
ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																												
		Maximum Discharge		1 Hour		2 Hours		Maximum Volume for Selected Time Interval				1 Day		2 Days		8 Days												
		Date	Rate	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.											
1970		9-23	0.006	9-23	0.001	9-23	0.001	9-23	0.001	9-23	0.001	9-23	0.001	9-23	0.001	9-23	0.001											
		9-23	0.770	9-23	0.460	9-23	0.600	9-23	0.680	9-23	0.680	9-23	0.680	9-23	0.680	9-23	0.680											
MAXIMUMS FOR PERIOD OF RECORD																												
		9-23	0.770	9-23	0.460	9-23	0.600	9-23	0.680	9-23	0.680	9-23	0.680	9-23	0.680	9-23	0.680	9-19	0.850									
		1964		1964		1964		1964		1964		1964		1964		1964		1964										

NOTES: Watershed conditions: Paved roads - 1.5% of the area, rangeland - 98.5%. Range in poor to fair condition, severely overgrazed during a year depending on climatic conditions and stocking rates. For map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1967, USDA Misc. Pub. 1262, p. 70.6-7. Precipitation data by Thiessen method using rain gages 12 and 13. Precipitation and runoff records began May 1961; part-year amounts not included in averages. For long-time precipitation records, see National Weather Service records at the Texas Agricultural Experiment Station, Substation No. 14, 18 miles south of Sonora, Texas.

1970		DAILY PRECIPITATION (inches)						SONORA, TEXAS WATERSHED S-13						
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
1	0.0	0.24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.07E	0.0	0.0		
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.03E	0.0	0.0	0.0	0.0		
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.08E	0.0	0.0		
6	0.0	0.0	0.22E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
7	0.0	0.0	0.07E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
8	0.0	0.0	0.0	0.0	0.0	0.05E	0.0	0.0	0.0	0.0	0.0	0.0		
9	0.0	0.0	0.0	0.11E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
11	0.0	0.0	0.05E	0.0	0.0	0.0	0.0	0.0	0.0	0.73	0.0	0.0		
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.05E	0.0	0.0	0.0		
13	0.13E	0.0	0.0	0.0	0.39	0.0	0.0	0.0	0.32	0.0	0.0	0.0		
14	0.0	0.0	0.0	0.0	0.19	0.0	0.0	0.0	0.16	0.0	0.0	0.0		
15	0.08E	0.0	0.0	0.0	0.07	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
16	0.0	0.0	0.09E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
18	0.0 S	0.0	0.0	0.27E	0.0	0.0	0.0	0.0	0.0	0.46	0.0	0.0		
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.22E	0.0	0.0	0.0	0.0		
20	0.0	0.0	0.59	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
21	0.0	0.0	0.36E	0.0	0.0	0.66	0.0	0.0	0.0	0.0	0.0	0.0		
22	0.09E	0.64	0.0	0.0	0.0	0.83	0.0	0.32	0.97	0.0	0.0	0.0		
23	0.0	0.13	0.0	0.0	0.57	0.0	0.0	0.0	0.00	0.18E	0.0	0.0		
24	0.0	0.45	0.0	0.0	0.06	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.08	0.0	0.0	0.0		
26	0.0	0.0	0.0	0.02E	0.0	0.0	0.0	0.0	1.00	0.0	0.0	0.0		
27	0.0	0.11E	0.0	0.0	0.10E	0.0	0.0	0.0	0.17E	0.0	0.0	0.0		
28	0.0	0.0	0.0	0.0	0.02E	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
29	0.0	0.0	0.0	0.0	0.0	0.20E	0.0	0.0	0.0	0.0	0.0	0.0		
30	0.0	0.0	0.0	1.00	0.07E	0.0	0.0	0.33	0.0	0.0	0.0	0.0		
31	0.05		0.0		0.0		0.0	0.04E		0.0		0.0		
TOTAL	0.35	1.57	1.08	1.40	1.47	1.74	1.37	0.95	2.75	1.52	0.0	0.0		
STA AV	0.80	1.34	0.89	2.81	2.98	1.41	1.37	1.24	3.43	1.88	1.40	0.73		

NOTES: For daily air temperatures, in the vicinity, see table for W-14 p. 70.001. Precipitation values are Thiessen weighted average of rain gages 12 and 13. Records began May 1961; part-year amounts not included in averages. STA AV based on 9 yr record period. Estimate codes may indicate that non-significant event totals are included.

1970 MEAN DAILY DISCHARGE (cfs) SONORA, TEXAS WATERSHED S-13												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.0	0.0	0.048	0.0	0.0	0.0	0.0	0.0	0.0
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.081	0.0	0.0	0.0
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	0.0	0.0	0.0	0.015	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MEAN	0.0	0.0	0.0	0.0005	0.0	0.0016	0.0	0.0	0.0027	0.0	0.0	0.0
INCHES	0.0	0.0	0.0	0.000	0.0	0.000	0.0	0.0	0.001	0.0	0.0	0.0
STA AV	0.0	0.0	0.001	0.081	0.083	0.000	0.001	0.0	0.107	0.071	0.0	0.008

NOTES: To convert mean daily discharge in CFS to IN/DAY, multiply by 0.034696. Records began in May 1961; part-year amounts not included in averages. STA AV based on 9 yr record period.

SONORA, TEXAS WATERSHED W-1

LOCATION: Edwards County, Texas; 28 mi. (highway) south of Sonora; East Fork Devils River, Devils River, Rio Grande River Basin.

AREA: 10.20 acres

MONTHLY PRECIPITATION AND RUNOFF (inches)														SONORA, TEXAS WATERSHED W-1											
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual											
1970	P	0.25	1.83	1.09	0.89	4.66	1.63	0.0	2.59	4.08	1.01	0.0	0.0	18.03											
	Q	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
STA AV	P	1.18	1.62	0.82	2.72	2.88	2.08	2.10	2.22	3.87	2.03	1.26	0.57	23.35											
	Q	0.097	0.004	0.0	0.224	0.137	0.065	0.014	0.034	0.225	0.143	0.001	0.0	0.945											
ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																									
		Maximum Discharge		1 Hour		2 Hours		Maximum Volume for Selected Time Interval				1 Day		2 Days		8 Days									
		Date	Rate	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.								
1970		0-0	0.0	0-0	0.0	0-0	0.0	0-0	0.0	0-0	0.0	0-0	0.0	0-0	0.0	0-0	0.0								
MAXIMUMS FOR PERIOD OF RECORD																									
		4-30	1.680	4-30	0.990	4-30	1.180	4-30	1.280	4-30	1.300	4-30	1.300	4-29	1.490	9-21	1.570								
		1966		1966		1966		1966		1966		1966		1966		1964									

NOTES: Watershed conditions: 100% rangeland; root plowed for brush control, August 1970; fair level of management; stocking rate, 30-35 animal units per section. For map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1967, USDA Misc. Pub. 1262, p. 70.7-7. Precipitation data from rain gage 15. Precipitation and runoff records began October 1963; part-year amounts not included in station averages. No runoff occurred during 1970. For long-time precipitation records, see National Weather Service records at the Texas Agricultural Experiment Station, Substation No. 14. Watershed is on substation property.

1970 DAILY PRECIPITATION (inches)														SONORA, TEXAS WATERSHED W-1											
	Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec												
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.15E	0.0	0.0	0.0												
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0												
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0												
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.40	0.0	0.0	0.0	0.0												
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0												
6	0.0	0.40	0.18E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0												
7	0.0	0.0	0.06E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.07E	0.0	0.0												
8	0.0	0.0	0.0	0.0	0.0	0.0	0.15E	0.0	0.0	0.0	0.0	0.0	0.0												
9	0.0	0.0	0.0	0.0	0.49	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0												
10	0.0	0.0	0.0	0.0	0.0	0.0	0.22E	0.0	0.30	0.0	0.0	0.0	0.0												
11	0.0	0.0	0.06E	0.0	0.0	0.0	0.0	0.0	0.15	0.0	0.0	0.0	0.0												
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.05E	0.0	0.0	0.0												
13	0.13E	0.0	0.0	0.0	0.0	1.49	0.0	0.0	0.0	1.22	0.0	0.0	0.0												
14	0.0	0.0	0.0	0.0	0.0	0.18	0.0	0.0	0.0	0.0	0.0	0.0	0.0												
15	0.0	0.0	0.0	0.0	0.0	0.17E	0.0	0.0	0.0	0.0	0.0	0.0	0.0												
16	0.0	0.0	0.11E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0												
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.39	0.0	0.0	0.0												
18	0.0	0.0	0.0	0.0	0.17E	0.0	0.0	0.0	0.0	0.0	0.53	0.0	0.0												
19	0.0	0.0	0.09	0.0	0.0	0.0	0.0	0.0	0.25E	0.0	0.0	0.0	0.0												
20	0.0	0.06E	0.52	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0												
21	0.0	0.0	0.02E	0.0	0.0	0.0	0.73	0.0	0.0	0.06E	0.0	0.0	0.0												
22	0.0	0.75	0.0	0.0	0.0	0.35	0.43	0.0	0.24	0.68	0.0	0.0	0.0												
23	0.0	0.23	0.0	0.0	0.0	0.91	0.0	0.0	0.17	0.0	0.35	0.0	0.0												
24	0.0	0.25	0.0	0.08E	0.0	0.30	0.0	0.0	0.0	0.0	0.0	0.0	0.0												
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.33	0.0	0.0	0.0												
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.12	0.0	0.0	0.0												
27	0.0	0.14E	0.0	0.0	0.0	1.17	0.0	0.0	0.0	0.08E	0.06E	0.0	0.0												
28	0.0	0.0	0.0	0.0	0.0	0.09	0.0	0.0	0.0	0.0	0.0	0.0	0.0												
29	0.0	0.0	0.05E	0.0	0.0	0.0	0.10E	0.0	0.0	0.0	0.0	0.0	0.0												
30	0.0	0.0	0.0	0.15E	0.0	0.0	0.0	0.0	0.85	0.0	0.0	0.0	0.0												
31	0.12E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.23E	0.0	0.0	0.0	0.0												
TOTAL		0.25	1.83	1.09	0.89	4.66	1.63	0.0	2.59	4.08	1.01	0.0	0.0												
STA AV		1.18	1.62	0.82	2.72	2.88	2.08	2.10	2.22	3.87	2.03	1.26	0.57												

NOTES: For daily air temperatures, in the vicinity, see table for W-14, p. 70.001. Precipitation data obtained from rain gage 15. Records began October 1963; part-year amounts not included in averages. STA AV based on 7 yr record period. Estimate codes may indicate that non-significant event totals are included.

SONORA, TEXAS WATERSHED W-2

LOCATION: Edwards County, Texas; 28 mi. (highway) south of Sonora; East Fork Devils River, Devils River, Rio Grande River Basin.

AREA: 8.60 acres

MONTHLY PRECIPITATION AND RUNOFF (inches)														SONORA, TEXAS WATERSHED W-2				
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual				
1970	P	0.32	1.62	1.11	0.87	4.26	1.48	3.0	2.38	3.57	1.05	0.0	0.0	16.66				
	Q	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
STA AV	P	0.77	1.47	0.77	2.67	2.78	2.00	1.83	2.09	2.98	1.96	1.32	0.53	21.15				
	Q	0.0	0.002	0.0	0.361	0.170	0.058	0.0	0.035	0.0	0.213	0.002	0.0	0.840				
ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																		
		Maximum Discharge		1 Hour		2 Hours		Maximum Volume for Selected Time Interval										
		Date	Rate	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.			
1970		0- 0	0.0	0- 0	0.0	0- 0	0.0	0- 0	0.0	0- 0	0.0	0- 0	0.0	0- 0	0.0			
MAXIMUMS FOR PERIOD OF RECORD																		
		4-30	1.550	4-30	1.250	4-30	1.710	4-30	1.960	4-30	2.000	4-30	2.000	4-29	2.140			
		1966		1966		1966		1966		1966		1966		1966	1966			

NOTES: Watershed conditions: 100% rangeland; low good level of management; stocking rate, 32 animal units per section. For map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1967, USDA Misc. Pub. 1262, p. 70.8-6. Precipitation data from rain gage 16. Precipitation and runoff records began January 1965. No runoff occurred during 1970. For long-time precipitation records, see National Weather Service records at the Texas Agricultural Experiment Station, Substation No. 14. Watershed is on substation property.

1970 DAILY PRECIPITATION (inches)													SONORA, TEXAS WATERSHED W-2	
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.10E	0.0	0.0	0.0		
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.30	0.0	0.0	0.0	0.0		
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
6	0.0	0.22E	0.18E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
7	0.0	0.0	0.05E	0.0	0.0	0.0	0.0	0.0	0.0	0.06E	0.0	0.0		
8	0.0	0.0	0.0	0.0	0.0	0.13E	0.0	0.0	0.0	0.0	0.0	0.0		
9	0.0	0.0	0.0	0.49	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
10	0.0	0.0	0.0	0.0	0.0	0.15E	0.0	0.27	0.0	0.0	0.0	0.0		
11	0.0	0.0	0.05E	0.0	0.0	0.0	0.0	0.19	0.0	0.0	0.0	0.0		
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.03E	0.0	0.0	0.0		
13	0.20E	0.0	0.0	0.0	1.42	0.0	0.0	0.0	1.08	0.0	0.0	0.0		
14	0.0	0.0	0.0	0.0	0.20	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
15	0.0	0.0	0.0	0.0	0.13E	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
16	0.0	0.0	0.11E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.29	0.0	0.0	0.0		
18	0.0	0.0	0.0	0.17E	0.0	0.0	0.0	0.0	0.0	0.55	0.0	0.0		
19	0.0	0.0	0.08	0.0	0.0	0.0	0.0	0.14E	0.0	0.0	0.0	0.0		
20	0.0	0.04E	0.57	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
21	0.0	0.0	0.03E	0.0	0.0	0.68	0.0	0.0	0.06E	0.0	0.0	0.0		
22	0.0	0.74	0.0	0.0	0.23	0.29	0.0	0.27	0.62	0.0	0.0	0.0		
23	0.0	0.23E	0.0	0.0	0.85	0.0	0.0	0.16	0.0	0.40	0.0	0.0		
24	0.0	0.25E	0.0	0.08E	0.38	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.25	0.0	0.0	0.0		
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.09	0.0	0.0	0.0		
27	0.0	0.14E	0.0	0.0	0.95	0.0	0.0	0.0	0.05E	0.04E	0.0	0.0		
28	0.0	0.0	0.0	0.0	0.10	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
29	0.0	0.0	0.04E	0.0	0.0	0.23E	0.0	0.0	0.0	0.0	0.0	0.0		
30	0.0	0.0	0.0	0.13E	0.0	0.0	0.0	0.84	0.0	0.0	0.0	0.0		
31	0.12E		0.0		0.0		0.0	0.21E		0.0		0.0		
TOTAL	0.32	1.62	1.11	0.87	4.26	1.48	0.0	2.38	3.57	1.05	0.0	0.0		
STA AV	0.77	1.47	0.77	2.67	2.78	2.00	1.83	2.09	2.98	1.96	1.32	0.53		

NOTES: For daily air temperatures, in the vicinity, see table for W-14, p. 70.001. Precipitation data obtained from rain gage 16. Records began January 1965. STA AV based on 6 yr record period. Estimate codes may indicate that non-significant event totals are included.

SONORA, TEXAS WATERSHED W-3

LOCATION: Edwards County, Texas; 28 mi. (highway) south of Sonora; East Fork Devils River, Devils River, Rio Grande River Basin.

AREA: 6.70 acres

MONTHLY PRECIPITATION AND RUNOFF (inches)														SONORA, TEXAS WATERSHED W-3																	
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual																	
1970	P	0.25	1.35	1.08	1.19	3.88	1.39	0.0	3.42	3.19	0.78	0.0	0.10	16.63																	
	Q	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0																	
STA AV	P	0.75	1.51	0.81	2.99	3.04	2.02	1.73	2.52	2.83	2.23	1.34	0.55	22.22																	
	Q	0.0	0.0	0.0	0.211	0.010	0.0	0.0	0.0	0.0	0.012	0.0	0.0	0.233																	
ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																															
		Maximum Discharge		1 Hour		2 Hours		Maximum Volume for Selected Time Interval														2 Days		8 Days							
		Date	Rate	Date	Vol.	Date	Vol.	6 Hours		12 Hours		1 Day		1 Day		2 Days		8 Days													
								Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.												
1970		0- 0	0.0	0- 0	0.0	0- 0	0.0	0- 0	0.0	0- 0	0.0	0- 0	0.0	0- 0	0.0	0- 0	0.0	0- 0	0.0												
MAXIMUMS FOR PERIOD OF RECORD																															
		4-30	1.670	4-30	1.020	4-30	1.220	4-30	1.260	4-30	1.260	4-30	1.260	4-30	1.260	4-30	1.260	4-30	1.260	4-30	1.260										
		1966		1966		1966		1966		1966		1966		1966		1966		1966		1966											

NOTES: Watershed conditions: 100% rangeland; range in fair condition. For map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1967, USDA Misc. Pub. 1262, p. 70.9-4. Precipitation data from rain gage 17. Precipitation and runoff records began January 1965. No runoff occurred during 1970. For long-time precipitation records, see National Weather Service records at the Texas Agricultural Experiment Station, Substation No. 14, 18 miles south of Sonora, Texas.

1970 DAILY PRECIPITATION (inches)														SONORA, TEXAS WATERSHED W-3														
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec																
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0															
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0															
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0															
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.32	0.0	0.0	0.0	0.0															
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0															
6	0.0	0.0	0.18E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0															
7	0.0	0.0	0.06E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.05E	0.0	0.0															
8	0.0	0.0	0.0	0.0	0.0	0.16E	0.0	0.0	0.0	0.0	0.0	0.0	0.0															
9	0.0	0.0	0.0	0.75	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0															
10	0.0	0.0	0.0	0.0	0.0	0.33	0.0	0.79	0.0	0.0	0.0	0.0	0.0															
11	0.0	0.0	0.07E	0.0	0.0	0.0	0.0	0.03	0.0	0.0	0.0	0.0	0.0															
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.05E	0.0	0.0	0.0	0.0															
13	0.13E	0.0	0.0	0.0	1.07	0.0	0.0	0.0	0.93	0.0	0.0	0.10E	0.0															
14	0.0	0.0	0.0	0.0	0.23	0.0	0.0	0.0	0.05E	0.0	0.0	0.0	0.0															
15	0.0	0.0	0.0	0.0	0.0 E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0															
16	0.0	0.0	0.08E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0															
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.19E	0.0	0.0	0.0	0.0															
18	0.0	0.0	0.0	0.21E	0.0	0.0	0.0	0.0	0.0	0.65	0.0	0.0	0.0															
19	0.0	0.0	0.12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0															
20	0.0	0.04E	0.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0															
21	0.0	0.0	0.04E	0.0	0.0	0.30	0.0	0.0	0.06E	0.0	0.0	0.0	0.0															
22	0.0	0.76	0.0	0.0	0.0	0.32	0.0	0.20	0.75	0.0	0.0	0.0	0.0															
23	0.0	0.18E	0.0	0.0	1.24	0.0	0.0	0.14	0.02	0.0	0.0	0.0	0.0															
24	0.0	0.23E	0.0	0.06E	0.38	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0															
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.00	0.0	0.0	0.0	0.0															
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.06E	0.08E	0.0	0.0	0.0															
27	0.0	0.14E	0.0	0.0	1.19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0															
28	0.0	0.0	0.0	0.0	0.07	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0															
29	0.0	0.03E	0.0	0.0	0.0	0.28E	0.0	0.0	0.0	0.0	0.0	0.0	0.0															
30	0.0	0.0	0.0	0.17E	0.0	0.0	0.0	1.44	0.0	0.0	0.0	0.0	0.0															
31	0.12E	0.0	0.0	0.0	0.0	0.0	0.0	0.50	0.0	0.0	0.0	0.0	0.0															
TOTAL	0.25	1.35	1.08	1.19	3.88	1.39	0.0	3.42	3.19	0.78	0.0	0.10																
STA AV	0.75	1.51	0.81	2.90	3.04	2.02	1.73	2.52	2.83	2.23	1.34	0.55																

NOTES: For daily air temperatures, in the vicinity, see table for Watershed W-14, 70.001. Precipitation data obtained from rain gage 17. Records began January 1965. STA AV based on 6 yr record period. Estimate codes may indicate that non-significant event totals are included.

SONORA, TEXAS WATERSHED W-4

LOCATION: Edwards County, Texas; 28 mi. (highway) south of Sonora; East Fork Devils River, Devils River, Rio Grande River Basin.

AREA: 4.50 acres

MONTHLY PRECIPITATION AND RUNOFF (inches)														SONORA, TEXAS WATERSHED W-4															
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual															
1970	P	0.34	1.44	0.95	1.24	3.72	1.24	0.0	3.92	2.79	0.78	0.0	0.0	16.42															
	Q	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0															
STA AV	P	0.79	1.38	0.97	3.56	2.21	2.10	2.26	2.97	3.34	2.44	1.50	0.46	23.97															
	Q	0.0	0.0	0.0	0.048	0.0	0.0	0.0	0.0	0.0	0.014	0.0	0.0	0.062															
ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																													
		Maximum Discharge				1 Hour		2 Hours		Maximum Volume for Selected Time Interval				2 Days		8 Days													
		Date	Rate	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.												
1970		0- 0	0.0	0- 0	0.0	0- 0	0.0	0- 0	0.0	0- 0	0.0	0- 0	0.0	0- 0	0.0	0- 0	0.0												
MAXIMUMS FOR PERIOD OF RECORD																													
		4-30	0.320	4-30	0.200	4-30	0.240	4-30	0.250	4-30	0.250	4-30	0.250	4-30	0.250	4-30	0.250												
		1966		1966		1966		1966		1966		1966		1966		1966													

NOTES: Watershed conditions: Rangeland - 100% range in low good condition. For map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1967, USDA Misc. Pub. 1262, p. 70.10-4. Precipitation data from rain gage 18. Precipitation and runoff records began January 1966. No runoff occurred during 1970. For long-time precipitation records, see National Weather Service records at Texas Agricultural Experiment Station, Substation No. 14, 18 miles south of Sonora, Texas.

1970 DAILY PRECIPITATION (inches)														SONORA, TEXAS WATERSHED W-4														
	Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec															
	1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0															
	2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0															
	3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0															
	4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.33	0.0	0.0	0.0	0.0															
	5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0															
	6	0.0	0.11E	0.10E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0															
	7	0.0	0.0	0.08E	0.0	0.0	0.0	0.0	0.0	0.0	0.07E	0.0	0.0															
	8	0.0	0.0	0.0	0.0	0.0	0.13E	0.0	0.0	0.0	0.0	0.0	0.0															
	9	0.0	0.0	0.0	0.70	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0															
	10	0.0	0.0	0.0	0.0	0.0	0.30	0.0	0.90	0.0	0.0	0.0	0.0															
	11	0.0	0.0	0.07E	0.0	0.0	0.0	0.0	0.11	0.0	0.0	0.0	0.0															
	12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.04E	0.0	0.0	0.0															
	13	0.19E	0.0	0.0	0.0	1.14	0.0	0.0	0.0	0.86	0.0	0.0	0.0															
	14	0.0	0.0	0.0	0.0	0.18	0.0	0.0	0.0	0.0	0.0	0.0	0.0															
	15	0.0	0.0	0.0	0.0	0.10E	0.0	0.0	0.0	0.0	0.0	0.0	0.0															
	16	0.0	0.0	0.06E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0															
	17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.02E	0.0	0.0	0.0															
	18	0.0	0.0	0.0	0.23E	0.0	0.0	0.0	0.0	0.0	0.55	0.0	0.0															
	19	0.0	0.0	0.10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0															
	20	0.0	0.06E	0.51	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0															
	21	0.0	0.0	0.0	0.0	0.0	0.41	0.0	0.0	0.06E	0.0	0.0	0.0															
	22	0.0	0.72	0.0	0.0	0.0	0.21E	0.0	0.32	0.57	0.0	0.0	0.0															
	23	0.0	0.18E	0.0	0.0	1.09	0.0	0.0	0.12	0.0	0.11E	0.0	0.0															
	24	0.0	0.24E	0.0	0.06E	0.11	0.0	0.0	0.0	0.0	0.0	0.0	0.0															
	25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.06	0.0	0.0	0.0															
	26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.14	0.0	0.0	0.0															
	27	0.0	0.13E	0.0	0.0	1.02	0.0	0.0	0.0	0.04E	0.05E	0.0	0.0															
	28	0.0	0.0	0.0	0.0	0.08	0.0	0.0	0.0	0.0	0.0	0.0	0.0															
	29	0.0	0.0	0.03E	0.0	0.0	0.19E	0.0	0.0	0.0	0.0	0.0	0.0															
	30	0.0	0.0	0.0	0.25E	0.0	0.0	0.0	1.56	0.0	0.0	0.0	0.0															
	31	0.15E	0.0	0.0	0.0	0.0	0.0	0.0	0.58	0.0	0.0	0.0	0.0															
TOTAL		0.34	1.44	0.95	1.24	3.72	1.24	0.0	3.92	2.79	0.78	0.0	0.0															
STA AV		0.79	1.38	0.97	3.56	2.21	2.10	2.26	2.97	3.34	2.44	1.50	0.46															

NOTES: For daily air temperatures, in the vicinity, see table for Watershed W-14, p. 70.001. Precipitation data obtained from rain gage 18. Records began January 1966. STA AV based on 5 yr record period. Estimate codes may indicate that non-significant event totals are included.

SONORA, TEXAS WATERSHED W-5

LOCATION: Edwards County, Texas; 28 mi. (highway) south of Sonora; East Fork Devils River, Devils River, Rio Grande River Basin.

AREA: 7.20 acres

MONTHLY PRECIPITATION AND RUNOFF (inches)													SONORA, TEXAS WATERSHED W-5	
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual	
1970	P 0.22	1.16	0.93	1.29	3.28	1.02	0.0	3.85	2.51	0.67	0.0	0.0	14.93	
	Q 0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
STA AV	P 0.74	1.21	0.93	3.38	2.08	2.00	2.01	2.91	2.81	2.30	1.33	0.43	22.12	
	Q 0.0	0.0	0.0	0.234	0.013	0.084	0.004	0.024	0.001	0.125	0.0	0.0	0.485	
ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS														
	Maximum Discharge		1 Hour		2 Hours		6 Hours		12 Hours		1 Day		2 Days	
	Date	Rate	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.
1970	0- 0	0.0	0- 0	0.0	0- 0	0.0	0- 0	0.0	0- 0	0.0	0- 0	0.0	0- 0	0.0
MAXIMUMS FOR PERIOD OF RECORD														
	4-30	1.380	4-30	0.790	4-30	1.010	4-30	1.080	4-30	1.080	4-30	1.080	4-29	1.130
	1966		1966		1966		1966		1966		1966		1966	

NOTES: Watershed conditions: Rangeland - 100%; range overgrazed, low poor condition. For map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1967, USDA Misc. Pub. 1262, p. 70.11-5. Precipitation data from rain gage 19. Precipitation and runoff records began January 1966. No runoff occurred during 1970. For long-time precipitation records, see National Weather Service records at Texas Agricultural Experiment Station, Substation No. 14, 18 miles south of Sonora, Texas.

1970 DAILY PRECIPITATION (inches)													SONORA, TEXAS WATERSHED W-5	
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
2	3.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.30	0.0	0.0	0.0	0.0		
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
6	0.0	0.0	0.09E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
7	0.0	0.0	0.07E	0.0	0.0	0.0	0.0	0.0	0.0	0.07E	0.0	0.0		
8	0.0	0.0	0.0	0.0	0.0	0.12E	0.0	0.0	0.0	0.0	0.0	0.0		
9	0.0	0.0	0.0	0.75	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
10	0.0	0.0	0.0	0.0	0.0	0.32	0.0	0.97	0.0	0.0	0.0	0.0		
11	0.0	0.0	0.07E	0.0	0.0	0.0	0.0	0.13	0.0	0.0	0.0	0.0		
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.05E	0.0	0.0	0.0		
13	0.12E	0.0	0.0	0.0	1.09	0.0	0.0	0.0	0.63	0.0	0.0	0.0		
14	0.0	0.0	0.0	0.0	0.10E	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
15	0.0	0.0	0.0	0.0	0.10E	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
16	3.0	0.0	0.07E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.02E	0.0	0.0	0.0		
18	0.0	0.0	0.0	0.25E	0.0	0.0	0.0	0.0	0.0	0.51	0.0	0.0		
19	0.0	0.0	0.09	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
20	0.0	0.03E	0.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
21	0.0	0.0	0.0 E	0.0	0.0	0.26E	0.0	0.0	0.05E	0.0	0.0	0.0		
22	0.0	0.61	0.0	0.0	0.0	0.14E	0.0	0.29	0.61	0.0	0.0	0.0		
23	0.0	0.17E	0.0	0.0	0.84	0.0	0.0	0.11	0.0	0.03E	0.0	0.0		
24	0.0	0.24E	0.0	0.04E	0.06	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
25	3.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.06	0.0	0.0	0.0		
26	3.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.02	0.0	0.0	0.0		
27	0.0	0.11E	0.0	0.0	1.04	0.0	0.0	0.0	0.07E	0.06E	0.0	0.0		
28	3.0	0.0	0.0	0.0	0.05	0.10E	0.0	0.0	0.0	0.0	0.0	0.0		
29	0.0	0.04E	0.0	0.0	0.0	0.08E	0.0	0.0	0.0	0.0	0.0	0.0		
30	0.0	0.0	0.0	0.25E	0.0	0.0	0.0	1.59	0.0	0.0	0.0	0.0		
31	0.10E	0.0	0.0	0.0	0.0	0.0	0.0	0.46	0.0	0.0	0.0	0.0		
TOTAL	0.22	1.16	0.93	1.29	3.28	1.02	0.0	3.85	2.51	0.67	0.0	0.0		
STA AV	0.74	1.21	0.93	3.38	2.08	2.00	2.01	2.91	2.81	2.30	1.33	0.43		

NOTES: For daily air temperatures, in the vicinity, see table for Watershed W-14, p. 70.001. Precipitation data obtained from rain gage 19. Records began January 1966. STA AV based on 5 yr record period. Estimate codes may indicate that non-significant event totals are included.

SONORA, TEXAS WATERSHED W-6

LOCATION: Edwards County, Texas; 28 mi. (highway) south of Sonora; East Fork Devils River, Devils River, Rio Grande River Basin.

AREA: 6.90 acres

MONTHLY PRECIPITATION AND RUNOFF (inches)										SONORA, TEXAS WATERSHED W-6					
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual	
1970	P	0.29	1.38	1.16	1.25	3.94	1.28	0.0	3.55	3.18	0.78	0.0	0.0	16.61	
	Q	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
STA AV	P	0.82	1.32	1.05	3.55	2.19	2.03	2.06	2.99	3.20	2.41	1.61	0.43	23.65	
	Q	0.0	0.0	0.0	0.164	0.006	0.016	0.0	0.008	0.0	0.011	0.0	0.0	0.227	
ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS															
		Maximum Discharge		1 Hour		2 Hours		Maximum Volume for Selected Time Interval							
		Date	Rate	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.
1970		0- 0	0.0	0- 0	0.0	0- 0	0.0	0- 0	0.0	0- 0	0.0	0- 0	0.0	0- 0	0.0
MAXIMUMS FOR PERIOD OF RECORD															
		4-30	1.900	4-30	0.840	4-30	3.910	4-30	0.910	4-30	0.910	4-30	0.910	4-29	0.910
		1966		1966		1966		1966		1966		1966		1966	

NOTES: Watershed conditions: Rangeland - 100%; range condition - poor. For map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1967, USDA Misc. Pub. 1262, p. 70.12-4. Precipitation data from rain gage 20. Precipitation and runoff records began January 1966. No runoff occurred during 1970. For long-time precipitation records, see National Weather Service records at the Texas Agricultural Experiment Station, Substation No. 14, 18 miles south of Sonora, Texas.

1970 DAILY PRECIPITATION (inches)													SONORA, TEXAS WATERSHED W-6												
	Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec												
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0												
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0												
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0												
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0												
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0												
6	0.0	0.0	0.0	0.20E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0												
7	0.0	0.0	0.10E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0												
8	0.0	0.0	0.0	0.0	0.0	0.0	0.15E	0.0	0.0	0.0	0.0	0.0	0.0												
9	0.0	0.0	0.0	0.0	0.77	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0												
10	0.0	0.0	0.0	0.0	0.0	0.0	0.38	0.0	0.0	0.89	0.0	0.0	0.0												
11	0.0	0.0	0.0	0.05E	0.0	0.0	0.0	0.0	0.0	0.05	0.0	0.0	0.0												
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.06E	0.0	0.0	0.0												
13	0.16E	0.0	0.0	0.0	0.0	1.15	0.0	0.0	0.0	1.00	0.0	0.0	0.0												
14	0.0	0.0	0.0	0.0	0.0	0.11E	0.0	0.0	0.0	0.02E	0.0	0.0	0.0												
15	0.0	0.0	0.0	0.0	0.0	0.13E	0.0	0.0	0.0	0.0	0.0	0.0	0.0												
16	0.0	0.0	0.0	0.08E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0												
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.13E	0.0	0.0	0.0												
18	0.0	0.0	0.0	0.0	0.23E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0												
19	0.0	0.0	0.12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0												
20	0.0	0.04E	0.54	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0												
21	0.0	0.0	0.0	0.02E	0.0	0.0	0.38	0.0	0.0	0.0	0.05E	0.0	0.0												
22	0.0	0.72	0.0	0.0	0.0	0.0	0.17E	0.0	0.0	0.23	0.73	0.0	0.0												
23	0.0	0.20E	0.0	0.0	0.0	1.31	0.0	0.0	0.0	0.16	0.0	0.06E	0.0												
24	0.0	0.25E	0.0	0.06E	0.09	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0												
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.07	0.0	0.0	0.0												
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.06	0.0	0.0	0.0												
27	0.0	0.17E	0.0	0.0	0.0	1.10	0.0	0.0	0.0	0.06E	0.07E	0.0	0.0												
28	0.0	0.0	0.0	0.0	0.0	0.05	0.0	0.0	0.0	0.0	0.0	0.0	0.0												
29	0.0	0.05E	0.0	0.0	0.0	0.0	0.20E	0.0	0.0	0.0	0.0	0.0	0.0												
30	0.0	0.0	0.0	0.19E	0.0	0.0	0.0	0.0	1.40	0.0	0.0	0.0	0.0												
31	0.13E		0.0		0.0			0.0	0.50		0.0		0.0												
TOTAL		0.29	1.38	1.16	1.25	3.94	1.28	0.0	3.55	3.18	0.78	0.0	0.0												
STA AV		0.82	1.32	1.05	3.55	2.19	2.03	2.06	2.99	3.20	2.41	1.61	0.43												

NOTES: For daily air temperature, in the vicinity, see table for Watershed W-14, p. 70.001. Precipitation data obtained from rain gage 20. Records began January 1966. STA AV based on 5 yr record period. Estimate codes may indicate that non-significant event totals are included.

TREYNOR, IOWA WATERSHED 1												
1970	MEAN DAILY DISCHARGE (cfs)											
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.025	0.025	0.027	0.020	0.023	0.025	0.013	0.018	0.009	0.010	0.014	0.022
2	0.025	0.025	0.082	0.020	0.020	0.025	0.013	3.122	0.014	0.010	0.019	0.020
3	0.025	0.036	0.046	0.020	0.020	0.025	0.013	0.039	0.012	0.014	0.021	0.020
4	0.025	0.032	0.022	0.020	0.018	0.025	0.014	0.025	0.009	0.014	0.018	0.023
5	0.022	0.027	0.020	0.020	0.018	0.025	0.014	0.022	0.011	0.013	0.017	0.022
6	0.020	0.030	0.020	0.017	0.018	0.025	0.014	0.020	0.010	0.011	0.017	0.020
7	0.020	0.027	0.020	0.014	0.017	0.025	0.014	0.020	0.010	0.016	0.017	0.020
8	0.020	0.025	0.020	0.014	0.018	0.016	0.014	0.020	0.009	0.048	0.057	0.020
9	0.020	0.025	0.020	0.014	0.022	0.017	0.012	0.020	0.012	0.067	0.038	0.020
10	0.020	0.025	0.020	0.014	0.020	0.017	0.015	0.017	0.010	0.025	0.025	0.027
11	0.020	0.025	0.020	0.064	0.025	0.025	0.014	0.014	0.009	0.026	0.025	0.014
12	0.017	0.025	0.020	0.036	1.610	0.022	0.014	0.012	0.010	0.025	0.025	0.014
13	0.014	0.025	0.020	0.025	0.178	0.020	0.036	0.012	0.012	0.025	0.025	0.018
14	0.014	0.025	0.020	0.027	0.038	0.020	0.044	0.012	0.070	0.022	0.025	0.015
15	0.014	0.025	0.020	0.025	0.035	0.022	0.017	0.014	0.025	0.020	0.025	0.014
16	0.014	0.022	0.020	0.025	0.032	0.027	0.014	0.014	0.017	0.020	0.025	0.014
17	0.014	0.020	0.020	0.025	0.028	0.024	0.014	0.021	0.023	0.020	0.025	0.014
18	0.014	0.022	0.020	0.063	0.025	0.020	0.023	0.014	0.014	0.020	0.025	0.014
19	0.014	0.034	0.020	0.032	0.025	0.020	0.017	0.014	0.014	0.020	0.030	0.014
20	0.014	0.029	0.020	0.025	0.025	0.023	0.014	0.012	0.014	0.020	0.025	0.014
21	0.014	0.034	0.020	0.028	0.025	0.020	0.014	0.021	0.011	0.020	0.025	0.014
22	0.014	0.032	0.020	0.026	0.025	0.020	0.014	0.014	0.011	0.020	0.025	0.014
23	0.014	0.032	0.017	0.025	0.025	0.020	0.014	0.012	0.019	0.038	0.025	0.014
24	0.014	0.030	0.014	0.025	0.026	0.020	0.014	0.013	0.014	0.022	0.025	0.014
25	0.017	0.028	0.014	0.022	0.025	0.020	0.014	0.012	0.015	0.020	0.025	0.014
26	0.182	0.033	0.014	0.020	0.025	0.014	0.025	0.013	0.014	0.023	0.025	0.014
27	0.320	0.032	0.012	0.020	0.025	0.013	0.029	0.013	0.013	0.021	0.025	0.017
28	0.704	0.035	0.016	0.016	0.025	0.013	0.112	0.011	0.011	0.015	0.025	0.020
29	0.032	0.014	0.020	0.025	0.013	0.022	0.012	0.009	0.009	0.014	0.025	0.020
30	0.025	0.014	0.024	0.025	0.013	0.020	0.011	0.010	0.010	0.014	0.025	0.020
31	0.025	0.017		0.025	0.025	0.017	0.011	0.011		0.014		0.020
MEAN	0.0559	0.0282	0.0216	0.0245	0.0804	0.0206	0.0206	0.1164	0.0147	0.0216	0.0250	0.0175
INCHES	0.554	0.252	0.214	0.239	0.796	0.197	0.204	1.153	0.141	0.214	0.239	0.173
STA AV	0.327	0.546	0.541	0.362	0.666	2.535	0.387	0.497	0.594	0.313	0.236	0.225

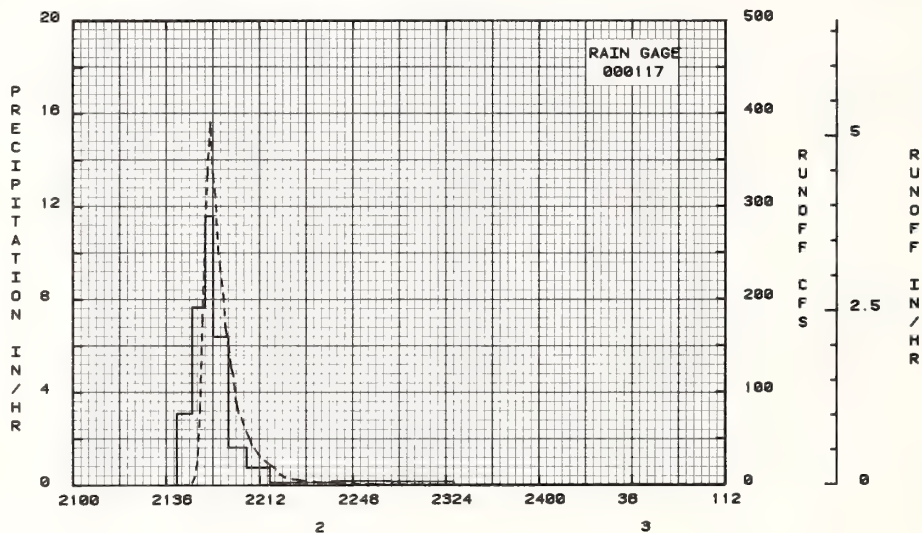
NOTES: To convert mean daily discharge in CFS to IN/DAY, multiply by 0.31949. STA AV based on 7 yr record period.

1970 SELECTED RUNOFF EVENT						TREYNOR, IOWA WATERSHED 1					
ANTECEDENT CONDITIONS			RAINFALL			RUNOFF					
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.	
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)	
EVENT OF AUGUST 2 - 3, 1970											
RG 000117			RG 000117								
8- 2	0.73	0.096	8- 2	2140	0.0	0.0	8- 2	2140	0.025	0.0	
				2146	3.0998	0.31		2141	0.254	0.0	
				2151	7.6805	0.95		2143	0.427	0.0002	
				2154	11.5993	1.53		2145	0.620	0.0004	
				2200	6.3996	2.17		2146	2.871	0.0008	
WATERSHED CONDITIONS: 95% Contoured corn, 8 ft. tall, late milk stage, hail damaged; 60% canopy; 5% gullies and grassed water- ways, grass 12 in. tall.				2207	1.6288	2.36		2147	9.493	0.0021	
				2216	0.7333	2.47		2148	25.538	0.0057	
				2240	0.1000	2.51		2149	80.967	0.0195	
				2303	0.1826	2.58		2150	183.960	0.0471	
				2327	0.1500	2.64		2151	268.482	0.0942	
								2152	343.212	0.1578	
								2153	391.329	0.2533	
								2154	333.610	0.3287	
								2155	309.902	0.3956	
								2156	256.334	0.4545	
				2157	229.676	0.5177					
				2158	205.068	0.5629					
				2159	168.756	0.6018					
				2200	150.599	0.6433					
				2201	128.642	0.6723					
				2202	117.038	0.6979					
				2203	89.195	0.7193					
				2204	77.386	0.7410					
				2205	72.354	0.7566					
				2207	56.848	0.7835					
				2209	43.554	0.8070					
				2210	39.378	0.8156					
				2212	31.775	0.8322					
				2215	23.848	0.8510					
				2218	17.966	0.8640					
				2220	11.559	0.8709					
				2222	8.302	0.8750					
				2225	6.022	0.8798					
				2230	4.111	0.8856					
				2235	2.761	0.8894					

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.01331. Event precipitation totals for rain gages 116 and 118 are 2.48 and 2.72 in., respectively and Thiessen weighted average total for event is 2.62 in.

1970 SELECTED RUNOFF EVENT			TREYNOR, IOWA WATERSHED 1					
ANTECEDENT CONDITIONS			RAINFALL			RUNOFF		
Date Mo-Day	Rainfall (inches)	Runoff (inches)	Date Mo-Day	Time of Day	Intensity (in/hr)	Acc. (inches)	Date Mo-Day	Time of Day
								Rate (cfs)
								Acc. (inches)
EVENT OF AUGUST 2 - 3, 1970 (CONTINUED)								
							8- 2	2245
								2255
								2300
								2308
								2315
								2325
								2336
								2345
								2400
							8- 3	100
								300

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.01331. Event precipitation totals for rain gages 116 and 118 are 2.48 and 2.72 in., respectively and Thiessen weighted average total for event is 2.62 in.



EVENT OF AUGUST 2 - 3, 1970
TREYNOR, IOWA WATERSHED 1

TREYNOR, IOWA WATERSHED 3												
1970	DAILY PRECIPITATION (inches)											
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.0	0.0	0.09	0.0	0.0	0.0	0.0	0.14	0.0	0.0	0.0	0.0
2	0.0	0.0	0.23	0.0	0.0	0.0	0.0	2.16	0.57	0.0	0.10	0.0
3	0.0	0.0	0.13	0.02	0.0	0.0	0.0	0.0	0.0	0.0	0.13	0.0
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.04	0.0	0.0	0.0	0.06	0.0	0.0	0.0
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.53	0.0	0.0
8	0.0	0.0	0.0	0.0	0.18	0.0	0.0	0.0	0.0	1.09	0.75	0.0
9	0.0	0.0	0.04	0.0	0.12	0.0	0.0	0.0	0.28	0.92	0.14	0.0
10	0.0	0.0	0.0	0.0	0.0	0.11	0.08	0.0	0.0	0.0	0.0	0.48
11	0.0	0.0	0.0	1.69	0.17	0.70	0.0	0.0	0.0	0.11	0.0	0.0
12	0.0	0.0	0.0	0.0	1.94	0.08	0.0	0.0	0.0	0.0	0.0	0.0
13	0.0	0.02	0.0	0.14	0.07	0.0	0.60	0.0	0.22	0.0	0.03	0.0
14	0.0	0.01	0.0	0.0	0.04	0.0	1.19	0.0	1.93	0.0	0.0	0.0
15	0.0	0.0	0.0	0.05	0.0	0.46	0.0	0.0	0.49	0.0	0.0	0.0
16	0.0	0.0	0.0	0.0	0.0	0.50	0.0	0.0	0.31	0.0	0.0	0.05
17	0.01	0.0	0.0	0.0	0.0	0.20	0.0	0.97	0.14	0.0	0.0	0.0
18	0.01	0.0	0.10	0.78	0.0	0.0	0.43	0.0	0.0	0.0	0.0	0.0
19	0.0	0.0	0.22	0.23	0.0	0.02	0.0	0.0	0.0	0.0	0.25	0.0
20	0.0	0.0	0.0	0.0	0.0	0.93	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.75	0.0	0.04	0.0	0.0
22	0.0	0.0	0.0	0.16	0.04	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.44	0.93	0.0	0.0
24	0.0	0.0	0.0	0.0	0.10	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.04	0.0	0.0	0.92	0.0	0.0	0.09	0.0	0.0	0.0
26	0.0	0.0	0.0	0.0	0.0	0.0	0.91	0.0	0.0	0.50	0.0	0.0
27	0.0	0.0	0.0	0.0	0.0	0.0	0.32	0.0	0.0	0.0	0.0	0.0
28	0.0	0.26	0.0	0.0	0.02	0.0	1.22	0.0	0.0	0.0	0.0	0.0
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	0.0	0.0	0.0	0.36	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	0.0	0.0	0.0	0.02	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL	0.02	0.29	0.85	3.43	2.74	2.12	4.75	4.02	4.53	4.12	1.40	0.53
STA AV	0.47	0.53	0.94	3.46	3.93	6.84	3.66	3.44	4.39	2.80	0.75	0.85

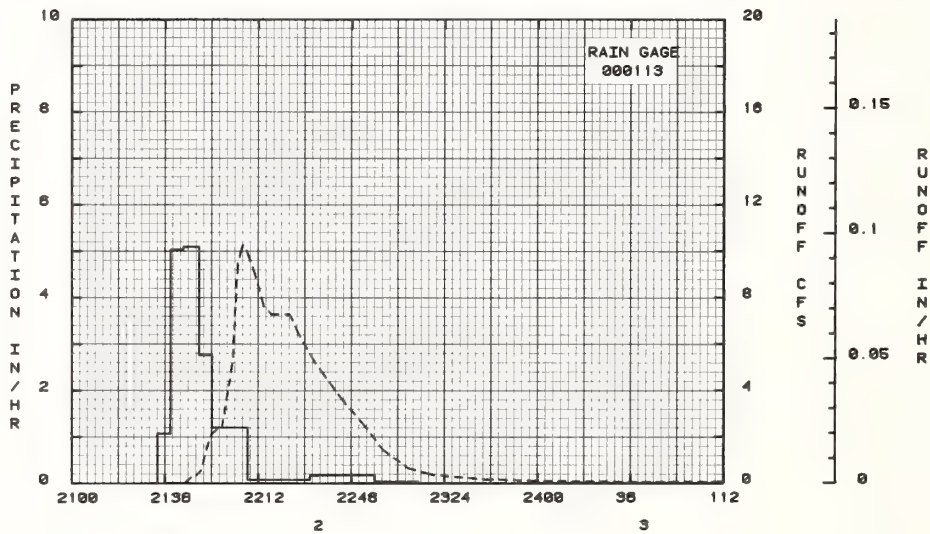
NOTES: Daily precipitation amounts are arithmetic average values from stations 113 and 114 before April 1 and after November 3; Thiessen weighted average values from rain gages 112, 113 and 114 for remainder of year. STA AV based on 7 yr record period.

TREYNOR, IOWA WATERSHED 3												
1970	MEAN DAILY DISCHARGE (cfs)											
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.022	0.073	0.037	0.027	0.047	0.033	0.014	0.014	0.010	0.011	0.022	0.027
2	0.022	0.064	0.049	0.027	0.039	0.030	0.014	0.310	0.016	0.009	0.322	0.027
3	0.022	0.055	0.045	0.027	0.039	0.030	0.014	0.031	0.012	0.010	0.023	0.024
4	0.022	0.055	0.036	0.027	0.039	0.030	0.014	0.020	0.009	0.010	0.022	0.022
5	0.022	0.055	0.033	0.027	0.039	0.030	0.013	0.017	0.011	0.011	0.022	0.022
6	0.022	0.055	0.033	0.027	0.039	0.029	0.015	0.015	0.009	0.012	0.020	0.022
7	0.022	0.051	0.033	0.027	0.036	0.026	0.016	0.013	0.008	0.014	0.019	0.022
8	0.022	0.047	0.033	0.027	0.036	0.025	0.014	0.015	0.009	0.080	0.063	0.022
9	0.022	0.047	0.033	0.027	0.041	0.025	0.014	0.017	0.013	0.132	0.098	0.022
10	0.022	0.047	0.033	0.027	0.039	0.026	0.016	0.014	0.011	0.038	0.030	0.025
11	0.022	0.047	0.033	0.048	0.037	0.032	0.014	0.014	0.010	0.030	0.027	0.022
12	0.019	0.047	0.033	0.054	0.226	0.024	0.014	0.014	0.010	0.027	0.027	0.022
13	0.017	0.047	0.033	0.047	0.055	0.024	0.020	0.012	0.013	0.027	0.027	0.024
14	0.017	0.047	0.033	0.047	0.053	0.025	0.034	0.011	0.089	0.027	0.027	0.027
15	0.017	0.047	0.033	0.051	0.045	0.027	0.013	0.011	0.038	0.027	0.027	0.027
16	0.017	0.043	0.033	0.055	0.044	0.033	0.011	0.012	0.025	0.027	0.027	0.027
17	0.017	0.039	0.033	0.055	0.043	0.030	0.009	0.028	0.021	0.027	0.027	0.027
18	0.017	0.039	0.033	0.053	0.039	0.025	0.014	0.012	0.017	0.027	0.027	0.024
19	0.017	0.043	0.033	0.049	0.036	0.025	0.012	0.008	0.017	0.027	0.029	0.022
20	0.017	0.039	0.033	0.047	0.036	0.026	0.009	0.008	0.014	0.027	0.027	0.022
21	0.017	0.039	0.033	0.047	0.036	0.025	0.009	0.019	0.014	0.027	0.027	0.022
22	0.017	0.039	0.033	0.050	0.038	0.024	0.008	0.010	0.016	0.027	0.027	0.022
23	0.017	0.039	0.033	0.047	0.039	0.023	0.008	0.008	0.022	0.160	0.026	0.022
24	0.017	0.036	0.033	0.047	0.038	0.023	0.010	0.008	0.016	0.045	0.024	0.022
25	0.017	0.033	0.033	0.047	0.037	0.024	0.011	0.008	0.018	0.039	0.027	0.022
26	0.025	0.033	0.033	0.047	0.035	0.023	0.029	0.008	0.016	0.052	0.027	0.022
27	0.090	0.033	0.033	0.047	0.033	0.022	0.018	0.008	0.015	0.029	0.027	0.022
28	0.464	0.035	0.035	0.042	0.031	0.020	0.051	0.007	0.014	0.022	0.027	0.022
29	0.078	0.033	0.033	0.047	0.031	0.022	0.015	0.006	0.011	0.022	0.027	0.022
30	0.073	0.030	0.052	0.030	0.030	0.016	0.015	0.006	0.011	0.022	0.027	0.022
31	0.073	0.027	0.027	0.031	0.031	0.014	0.014	0.008	0.022	0.022	0.027	0.022
MEAN	0.0415	0.0455	0.0339	0.0417	0.0448	0.0261	0.0155	0.0224	0.0171	0.0344	0.0293	0.0233
INCHES	0.286	0.283	0.234	0.278	0.309	0.174	0.107	0.154	0.114	0.237	0.196	0.161
STA AV	0.272	0.518	0.501	0.321	0.311	0.801	0.360	0.256	0.294	0.351	0.229	0.218

NOTES: To convert mean daily discharge in CFS to IN/DAY, multiply by 0.22245. STA AV based on 7 yr record period.

1970 SELECTED RUNOFF EVENT				TREYNOR, IOWA WATERSHED 3						
ANTECEDENT CONDITIONS			RAINFALL				RUNOFF			
Date Mo-Day	Rainfall (inches)	Runoff (inches)	Date Mo-Day	Time of Day	Intensity (in/hr)	Acc. (inches)	Date Mo-Day	Time of Day	Rate (cfs)	Acc. (inches)
EVENT OF AUGUST 2 - 3, 1970										
RG 000113			RG 000113							
8- 2	0.54	0.010	8- 2	2133	0.0	0.0	8- 2	2138	0.017	0.0
				2138	1.0799	0.09		2142	0.027	0.0
				2143	5.0403	0.51		2144	0.083	0.0
				2149	5.0997	1.02		2146	0.274	0.0001
				2154	2.7602	1.25		2148	0.342	0.0002
WATERSHED CONDITIONS:				2208	1.2000	1.53		2150	0.582	0.0004
96% Permanent bromegrass				2232	0.0750	1.56		2152	1.501	0.0007
pasture, moderately grazed				2257	0.1680	1.63		2154	2.161	0.0013
in rotation, 8-10 in. tall,				2314	0.0353	1.64		2156	2.341	0.0020
90% canopy; 4% gravel roads								2158	2.436	0.0028
and farmstead.								2202	5.171	0.0051
								2204	9.483	0.0075
								2206	10.283	0.0104
								2208	9.883	0.0137
								2211	8.883	0.0178
								2214	7.643	0.0217
								2217	7.292	0.0252
								2224	7.292	0.0331
								2228	6.332	0.0373
								2234	5.171	0.0427
								2238	4.562	0.0457
								2244	3.636	0.0494
								2254	2.341	0.0541
								2300	1.440	0.0559
								2310	0.653	0.0575
								2320	0.342	0.0583
								2340	0.147	0.0591
								2400	0.094	0.0595
								8- 3	30	0.055
										0.0598

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.009269. Event precipitation totals for rain gage 112 and 114 are 1.46 and 1.29 in., respectively, and the Thiessen weighted average event precipitation is 1.44 in.



TREYNOR, IOWA WATERSHED 2

LOCATION: Pottawattamie County, Iowa; approximately 6 miles southwest of Treynor; Keg Creek, Missouri River Basin.

AREA: 62.80 acres

TREYNOR, IOWA WATERSHED 2															
MONTHLY PRECIPITATION AND RUNOFF (inches)															
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual	
1970	P	0.02	0.21	0.82	3.54	2.92	2.31	5.45	4.76	4.55	4.29	1.37	0.53	30.77	
	Q	0.548	0.236	0.273	0.229	0.692	0.164	0.182	0.891	0.174	0.258	0.250	0.240	4.136	
STA AV	P	0.50	0.51	1.00	3.36	3.97	7.01	3.93	3.90	4.58	2.82	0.80	0.86	33.24	
	Q	0.338	0.616	0.564	0.331	0.635	2.378	0.319	0.428	0.548	0.317	0.225	0.223	6.921	
ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS															
		Maximum Discharge		1 Hour		2 Hours		Maximum Volume for Selected Time Interval		1 Day		2 Days		8 Days	
		Date	Rate	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.
1970		8- 2	3.384	8- 2	0.694	8- 2	0.703	8- 2	0.706	8- 2	0.709	8- 2	0.738	8- 2	0.747
		7-26	0.796												
MAXIMUMS FOR PERIOD OF RECORD															
		6-20	4.866	6-20	2.701	6-20	3.693	6-20	3.780	6-20	3.786	6-20	3.796	6-20	3.810
		1967		1967		1967		1967		1967		1967		1967	
														6- 4	5.531

NOTES: Watershed conditions: 95% contoured corn; 5% gullies and grassed waterways. Precipitation from rain gage 117 before April 1 and after November 3; Thiessen average of rain gages 115, 116, and 118 for remainder of year. Precipitation records began January 1, 1964. Runoff records began February 3, 1964. January 1 to February 3, 1964 runoff estimated and included in average. For daily air temperature, in the vicinity, see table for Watershed 3 (71.003). For topographic map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1964, USDA Misc. Pub. 1194, p. 71.2-5. For long-time precipitation records, see National Weather Service records period at Omaha, Nebraska.

TREYNOR, IOWA WATERSHED 2													
DAILY PRECIPITATION (inches)													
1970	Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
	1	0.0	0.0	0.06	0.0	0.0	0.0	0.0	0.06	0.0	0.0	0.0	0.0
	2	0.0	0.0	0.17	0.0	0.0	0.0	0.0	3.27	0.49	0.0	0.03	0.0
	3	0.0	0.0	0.16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.17	0.0
	4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	5	0.0	0.0	0.0	0.0	0.04	0.0	0.0	0.0	0.05	0.0	0.0	0.0
	6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.65	0.0	0.0
	8	0.0	0.0	0.0	0.0	0.11	0.0	0.0	0.0	0.0	1.27	0.72	0.0
	9	0.0	0.0	0.04	0.0	0.15	0.0	0.0	0.0	0.17	0.90	0.16	0.0
	10	0.0	0.0	0.0	0.0	0.0	0.13	0.09	0.0	0.0	0.0	0.0	0.48
	11	0.0	0.0	0.0	1.85	0.38	0.71	0.0	0.0	0.0	0.11	0.0	0.0
	12	0.0	0.0	0.0	0.0	1.82	0.03	0.0	0.0	0.0	0.0	0.0	0.0
	13	0.0	0.01	0.0	0.16	0.21	0.0	1.16	0.0	0.27	0.0	0.03	0.0
	14	0.0	0.01	0.0	0.0	0.03	0.0	0.99	0.0	2.05	0.0	0.0	0.0
	15	0.0	0.0	0.0	0.06	0.0	0.52	0.0	0.0	0.45	0.0	0.0	0.0
	16	0.0	0.0	0.0	0.0	0.0	0.47	0.0	0.0	0.24	0.0	0.0	0.05
	17	0.01	0.0	0.0	0.0	0.0	0.31	0.0	0.65	0.22	0.0	0.0	0.0
	18	0.01	0.0	0.05	0.75	0.0	0.0	0.64	0.0	0.0	0.0	0.0	0.0
	19	0.0	0.0	0.30	0.24	0.0	0.04	0.0	0.0	0.0	0.0	0.26	0.0
	20	0.0	0.0	0.0	0.0	0.0	0.05	0.0	0.0	0.0	0.0	0.0	0.0
	21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.78	0.0	0.04	0.0	0.0
	22	0.0	0.0	0.0	0.10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.51	0.82	0.0	0.0
	24	0.0	0.0	0.0	0.0	0.10	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	25	0.0	0.0	0.04	0.0	0.0	0.05	0.0	0.0	0.10	0.0	0.0	0.0
	26	0.0	0.0	0.0	0.0	0.0	0.0	0.83	0.0	0.0	0.50	0.0	0.0
	27	0.0	0.0	0.0	0.0	0.0	0.0	0.48	0.0	0.0	0.0	0.0	0.0
	28	0.0	0.19	0.0	0.0	0.03	0.0	1.26	0.0	0.0	0.0	0.0	0.0
	29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	30	0.0	0.0	0.0	0.38	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	31	0.0	0.0	0.0	0.0	0.05	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL		0.02	0.21	0.82	3.54	2.92	2.31	5.45	4.76	4.55	4.29	1.37	0.53
STA AV		0.50	0.51	1.00	3.36	3.97	7.01	3.93	3.90	4.58	2.82	0.80	0.86

NOTES: Daily precipitation amounts are Thiessen weighted average values from stations 115, 116, and 118 for period of April 1 through November 3, and from station 117 for remainder of year. STA AV based on 7 yr record period.

1970 MEAN DAILY DISCHARGE (cfs) TREYNOR, IOWA WATERSHED 2												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.027	0.027	0.039	0.027	0.027	0.027	0.015	0.014	0.015	0.016	0.022	0.030
2	0.027	0.027	0.103	0.028	0.023	0.027	0.014	2.570	0.023	0.015	0.024	0.027
3	0.027	0.027	0.046	0.027	0.020	0.024	0.014	0.035	0.018	0.015	0.029	0.027
4	0.027	0.027	0.027	0.027	0.020	0.024	0.015	0.019	0.015	0.014	0.027	0.027
5	0.027	0.032	0.024	0.027	0.024	0.024	0.015	0.017	0.017	0.014	0.027	0.027
6	0.027	0.034	0.021	0.027	0.019	0.023	0.016	0.017	0.014	0.016	0.024	0.027
7	0.027	0.035	0.019	0.027	0.017	0.021	0.015	0.017	0.014	0.023	0.022	0.027
8	0.027	0.033	0.019	0.024	0.019	0.020	0.014	0.017	0.013	0.090	0.050	0.027
9	0.027	0.033	0.023	0.024	0.027	0.020	0.014	0.017	0.019	0.083	0.068	0.027
10	0.027	0.033	0.027	0.024	0.021	0.021	0.019	0.016	0.016	0.030	0.030	0.030
11	0.027	0.033	0.029	0.070	0.027	0.028	0.016	0.016	0.015	0.028	0.027	0.024
12	0.027	0.030	0.028	0.036	1.681	0.022	0.014	0.014	0.015	0.027	0.027	0.024
13	0.027	0.027	0.028	0.028	0.065	0.018	0.035	0.014	0.019	0.027	0.027	0.026
14	0.027	0.027	0.027	0.025	0.027	0.014	0.040	0.014	0.077	0.024	0.027	0.027
15	0.027	0.027	0.029	0.022	0.026	0.020	0.017	0.016	0.034	0.022	0.027	0.027
16	0.027	0.029	0.031	0.022	0.023	0.029	0.014	0.017	0.025	0.022	0.027	0.027
17	0.027	0.030	0.030	0.019	0.022	0.024	0.014	0.031	0.027	0.022	0.027	0.027
18	0.027	0.027	0.028	0.045	0.020	0.015	0.025	0.023	0.020	0.022	0.027	0.027
19	0.027	0.026	0.034	0.034	0.021	0.016	0.019	0.020	0.018	0.023	0.031	0.027
20	0.027	0.026	0.033	0.027	0.018	0.018	0.016	0.018	0.017	0.025	0.027	0.027
21	0.027	0.030	0.031	0.022	0.020	0.014	0.015	0.030	0.016	0.025	0.027	0.027
22	0.027	0.030	0.027	0.022	0.020	0.013	0.014	0.018	0.017	0.024	0.027	0.027
23	0.027	0.030	0.027	0.021	0.022	0.014	0.014	0.014	0.026	0.083	0.027	0.027
24	0.027	0.027	0.027	0.020	0.021	0.014	0.015	0.015	0.017	0.027	0.027	0.027
25	0.032	0.027	0.027	0.019	0.025	0.015	0.014	0.014	0.020	0.027	0.027	0.027
26	0.168	0.027	0.027	0.019	0.025	0.014	0.030	0.015	0.017	0.035	0.027	0.027
27	0.307	0.027	0.027	0.019	0.023	0.013	0.031	0.014	0.016	0.027	0.027	0.027
28	0.661	0.032	0.031	0.018	0.025	0.011	0.089	0.015	0.016	0.023	0.027	0.027
29	0.037		0.028	0.019	0.025	0.012	0.018	0.014	0.015	0.022	0.027	0.027
30	0.027		0.027	0.025	0.025	0.015	0.015	0.014	0.015	0.022	0.030	0.027
31	0.027		0.027		0.027		0.015	0.014		0.022		0.027
MEAN	0.0615	0.0293	0.0307	0.0265	0.0776	0.0190	0.0204	0.0999	0.0201	0.0289	0.0290	0.0270
INCHES	0.548	0.236	0.273	0.229	0.692	0.164	0.182	0.891	0.174	0.258	0.250	0.240
STA AV	0.338	0.616	0.564	0.331	0.635	2.378	0.319	0.428	0.548	0.317	0.225	0.223

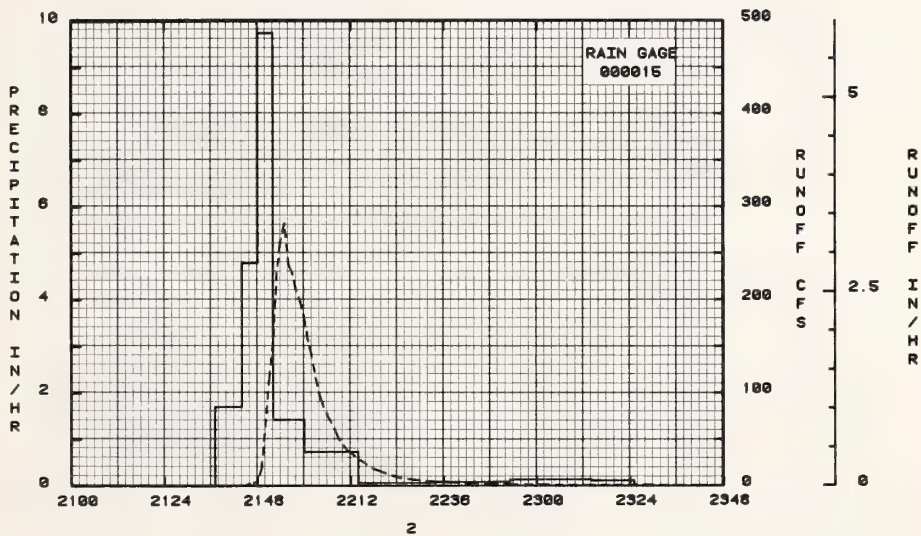
NOTES: To convert mean daily discharge in CFS to IN/DAY, multiply by 0.28746. STA AV based on 7 yr record period.

1970			SELECTED RUNOFF EVENT				TREYNOR, IOWA WATERSHED 2					
ANTECEDENT CONDITIONS			RAINFALL				RUNOFF					
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.		
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)		
EVENT OF AUGUST 2 - 3, 1970												
8- 2	RG 000115		8- 2	RG 000115			8- 2					
	0.78	0.035		2137	0.0	0.0		2138	0.017	0.0		
				2144	1.7143	0.20		2139	0.033	0.0		
				2148	4.8001	0.52		2140	0.094	0.0		
				2152	9.7501	1.17		2141	0.214	0.0		
				2200	1.4249	1.36		2143	0.514	0.0002		
WATERSHED CONDITIONS:												
95% Contoured corn, 8 ft.					2214	0.7286	1.53		2144	0.999	0.0003	
tall, late milk stage, hail					2234	0.0600	1.55		2145	1.560	0.0006	
damaged, 60% canopy; 5%					2253	0.0947	1.58		2146	2.541	0.0010	
gullies and grassed water-					2314	0.1429	1.63		2147	3.451	0.0016	
ways, grass 12 in. tall.					2325	0.1091	1.65		2148	5.642	0.0025	
								2149	19.107	0.0054		
								2150	64.246	0.0132		
								2151	116.288	0.0301		
								2152	154.351	0.0554		
								2153	229.476	0.1003		
								2154	266.187	0.1467		
								2155	282.492	0.1980		
								2156	238.279	0.2467		
								2157	227.975	0.3012		
								2158	209.469	0.3421		
								2159	198.665	0.3803		
								2200	180.459	0.4246		
								2201	156.551	0.4561		
								2202	138.096	0.4837		
								2203	115.338	0.5074		
								2204	96.937	0.5322		
								2205	84.928	0.5492		
								2206	74.475	0.5641		
								2207	68.217	0.5775		
								2208	59.740	0.5925		
								2209	49.641	0.6027		
								2211	38.763	0.6192		
								2213	32.050	0.6341		
								2216	23.128	0.6509		
								2218	17.946	0.6586		

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.01198. Event precipitation totals for rain gage 116 and 118 are 2.48 and 2.72 respectively, and Thiessen weighted average total for event is 2.23 in.

1970 SELECTED RUNOFF EVENT			TREYNOR, IOWA WATERSHED 2					
ANTECEDENT CONDITIONS			RAINFALL			RUNOFF		
Date Mo-Day	Rainfall (inches)	Runoff (inches)	Date Mo-Day	Time of Day	Intensity (in/hr)	Acc. (inches)	Date Mo-Day	Time of Day
EVENT OF AUGUST 2 - 3, 1970 (CONTINUED)								
							8- 2	2221
								2223
								2225
								2228
								2233
								2238
								2243
								2248
								2255
								2303
								2313
								2328
								2338
								2343
								2348
							8- 3	2400
								30
								200
								500

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.01198. Event precipitation totals for rain gage 116 and 118 are 2.48 and 2.72 respectively, and Thiessen weighted average total for event is 2.23 in.



EVENT OF AUGUST 2 - 3, 1970
TREYNOR, IOWA WATERSHED 2

TREYNOR, IOWA WATERSHED 3

LOCATION: Pottawattamie County, Iowa; approximately 3 miles southwest of Treynor; Silver Creek, West Nishnabotna River, Missouri River Basin.

AREA: 107.00 acres

MONTHLY PRECIPITATION AND RUNOFF (inches)														TREYNOR, IOWA WATERSHED 3									
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual									
1970	P	0.02	0.29	0.85	3.43	2.74	2.12	4.75	4.02	4.53	4.12	1.40	0.53	28.60									
	Q	0.286	0.283	0.234	0.278	0.309	0.174	0.107	0.154	0.114	0.237	0.196	0.161	2.533									
STA AV	P	0.47	0.53	0.94	3.46	3.93	6.84	3.66	3.44	4.39	2.80	0.75	0.85	32.07									
	Q	0.272	0.518	0.501	0.321	0.311	0.801	0.360	0.256	0.294	0.351	0.229	0.218	4.432									
ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																							
		Maximum Discharge		1 Hour		2 Hours		Maximum Volume for Selected Time Interval		6 Hours		12 Hours		1 Day		2 Days		8 Days					
		Date	Rate	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.				
1970		8-2	0.095	8-2	0.053	8-2	0.059	1-28	0.083	1-28	0.090	1-27	0.111	1-27	0.129	1-27	0.218						
MAXIMUMS FOR PERIOD OF RECORD																							
		6-20	2.010	6-20	1.005	6-20	1.287	6-20	1.336	6-20	1.350	6-20	1.371	2-27	1.408	6-14	1.741						
		1967		1967		1967		1967		1967		1967		1965		1967							

NOTES: Watershed conditions: 96% permanent pasture with controlled grazing; 4% gravel roads and farmstead. Precipitation: Arithmetic average of rain gages 113 and 114 before April 1 and after November 3; Thiessen average of gages 112, 113 and 114 for remainder of year. Precipitation records began January 1, 1964. Runoff records began January 2, 1964, January 1, 1964 runoff estimated and included in average. For topographic map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1964, USDA Misc. Pub. 1194, p. 71.3-4. For long-time precipitation records, see National Weather Service records at Omaha, Nebraska.

1970 DAILY AIR TEMPERATURE (degrees F)													TREYNOR, IOWA WATERSHED 3	
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
	max min	max min	max min	max min	max min	max min	max min	max min	max min	max min	max min	max min		
1	30 15	48 18	36 32	36 22	48 36	66 60	100 77	87 62	95 66	84 50	45 28	61 40		
2	15 2	18 -2	60 35	57 20	68 34	74 56	100 73	91 66	84 66	81 50	40 35	56 25		
3	19 1	22 -3	58 30	46 26	81 41	72 53	82 62	82 64	90 63	63 41	38 33	57 29		
4	18 2	47 21	49 24	53 21	76 49	72 48	76 53	85 64	86 61	79 41	45 32	54 20		
5	6 -6	50 24	54 28	68 32	71 51	86 54	82 52	90 70	81 65	86 62	57 28	39 15		
6	9 -5	56 32	49 30	64 36	74 46	86 58	82 60	86 71	96 73	74 62	66 35	32 8		
7	0 -8	48 31	59 32	60 40	84 56	90 60	81 88	73 82	62 68	40 42	32 50	22 1		
8	2 -12	42 24	61 30	64 41	86 60	89 62	88 65	81 70	88 56	41 36	52 42	55 31		
9	13 -3	36 21	32 24	71 36	66 54	88 69	88 58	74 67	87 55	38 29	45 36	40 26		
10	28 0	42 26	30 21	80 35	72 48	82 66	83 60	84 67	72 45	54 30	60 32	29 20		
11	28 10	36 25	35 20	81 51	83 58	83 61	88 66	84 64	76 48	58 42	47 33	19 15		
12	22 2	48 20	34 20	54 37	83 62	73 60	92 65	88 64	64 53	60 43	37 31	30 19		
13	36 8	21 12	30 19	42 36	76 60	88 60	93 69	92 64	53 44	53 37	38 32	36 19		
14	26 12	16 11	32 18	46 35	61 54	94 73	97 68	92 64	54 44	51 32	32 19	32 18		
15	35 22	31 8	38 14	66 40	62 43	90 72	81 60	84 62	62 51	53 32	35 14	38 25		
16	26 2	36 18	43 14	65 34	72 43	86 65	88 62	83 59	57 51	59 30	49 24	30 22		
17	2 -7	66 28	44 18	58 34	80 50	88 70	92 65	76 65	67 55	59 32	53 30	32 30		
18	-1 -10	46 4	35 30	48 41	89 60	78 64	88 66	92 68	80 57	59 34	48 30	31 15		
19	8 -14	34 2	36 30	52 38	86 62	74 55	78 60	88 63	75 60	58 40	39 31	20 8		
20	9 -15	43 2	42 28	48 34	89 64	72 58	74 52	79 59	91 67	64 40	48 26	27 7		
21	10 -16	61 28	50 23	65 32	90 70	74 53	76 52	75 52	75 62	69 46	48 34	25 21		
22	38 9	54 26	38 28	74 36	90 64	78 56	80 53	79 59	65 54	68 54	36 14	32 14		
23	26 18	50 22	44 28	61 32	76 63	89 56	80 55	83 56	56 54	64 55	16 6	14 5		
24	41 25	50 31	53 27	72 40	84 60	85 62	87 62	85 57	73 52	66 57	28 8	40 5		
25	44 33	32 16	42 32	78 46	76 52	88 57	89 68	85 56	63 48	62 48	52 26	27 9		
26	46 30	54 26	42 28	81 51	80 50	84 62	90 68	90 62	64 37	54 37	32 25	36 18		
27	42 29	48 29	33 11	84 60	86 62	85 56	84 70	92 65	68 42	49 38	32 24	27 9		
28	42 29	35 30	40 8	90 65	78 60	94 64	90 70	94 68	81 46	47 33	33 32	26 8		
29	34 16		45 20	84 56	82 62	98 74	96 73	92 66	83 50	47 29	58 32	34 11		
30	45 24		46 30	56 41	86 63	94 76	98 74	86 60	86 50	43 35	62 34	38 22		
31	46 28		46 26		76 62		90 71	84 56		42 30		39 17		
AV.	24 7	42 19	43 24	64 38	78 55	83 61	87 64	86 63	75 55	60 41	44 28	36 18		
MEAN	15.6	30.4	33.9	51.2	66.3	72.4	75.4	74.5	64.9	50.3	35.9	26.8		
STA AV	28 10	35 15	46 24	61 38	73 51	80 59	86 65	82 60	73 52	63 41	47 28	34 17		

NOTES: Temperature data taken from hygrothermograph charts. The recording period is from 0001 to 2400 for the date shown. STA AV based on 6 yr record period.

TREYNOR, IOWA WATERSHED 4

LOCATION: Pottawattamie County, Iowa; approximately 3 miles southwest of Treynor; Silver Creek, West Nishnabotna River, Missouri River Basin.

AREA: 150.00 acres

MONTHLY PRECIPITATION AND RUNOFF (inches)														TREYNOR, IOWA WATERSHED 4									
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual									
1970	P	0.02	0.26	0.82	3.38	2.66	2.10	4.62	4.15	4.45	4.44	1.36	0.51	28.77									
	Q	0.388	0.412	0.419	0.365	0.392	0.423	0.317	0.255	0.197	0.259	0.319	0.360	4.104									
STA AV	P	0.46	0.53	0.93	3.47	3.89	6.93	3.67	3.45	4.75	2.93	0.77	0.81	32.58									
	Q	0.410	0.425	0.614	0.476	0.539	1.047	0.835	0.553	0.554	0.544	0.485	0.443	6.925									
ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																							
		Maximum Discharge		1 Hour		2 Hours		Maximum Volume for Selected Time Interval															
		Date	Date	Date	Vol.	Date	Vol.	Date	6 Hours Vol.	Date	12 Hours Vol.	Date	1 Day Vol.	Date	2 Days Vol.	Date	8 Days Vol.						
1970		5-12	0.068	5-12	0.014	5-12	0.016	1-28	0.027	1-28	0.033	1-27	0.047	1-27	0.063	1-27	0.150						
MAXIMUMS FOR PERIOD OF RECORD																							
		6-25	0.296	6-22	0.166	6-20	0.228	2-28	0.352	2-28	0.496	2-28	0.645	2-28	0.758	6-20	1.072						
		1966		1964		1967		1965		1965		1965		1965		1967							

NOTES: Watershed conditions: 82% contoured corn above level terraces which have a capacity of 2 inches of runoff; 7% contoured corn below the bottom terraces; 10% grassed terrace backslopes; 1% gully. Precipitation from rain gage 113 before April 1 and after November 3; Thiessen average of gages 111, 112 and 113 for remainder of year. Precipitation records began January 1, 1964. Runoff records began February 27, 1964. January 1 to February 27, 1964 runoff estimated and included in average. For daily air temperature, in the vicinity, see table for Watershed 3 (71.003). For topographic map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1965, USDA Misc. Pub. 1194, p. 71.4-4. For long-time precipitation records, see National Weather Service records at Omaha, Nebraska.

1970 DAILY PRECIPITATION (inches)													TREYNOR, IOWA WATERSHED 4	
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
1	0.0	0.0	0.09	0.0	0.0	0.0	0.0	0.20	0.0	0.0	0.0	0.0		
2	0.0	0.0	0.20	0.0	0.0	0.0	0.0	2.28	0.44	0.0	0.08	0.0		
3	0.0	0.0	0.16	0.01	0.0	0.0	0.0	0.0	0.0	0.0	0.15	0.0		
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
5	0.0	0.0	0.0	0.0	0.05	0.0	0.0	0.0	0.05	0.0	0.0	0.0		
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.59	0.0	0.0		
8	0.0	0.0	0.0	0.0	0.15	0.0	0.0	0.0	0.0	1.09	0.68	0.0		
9	0.0	0.0	0.04	0.0	0.13	0.0	0.0	0.0	0.30	1.13	0.21	0.0		
10	0.0	0.0	0.0	0.0	0.0	0.09	0.08	0.0	0.0	0.0	0.0	0.45		
11	0.0	0.0	0.0	1.65	0.16	0.70	0.0	0.0	0.0	0.11	0.0	0.0		
12	0.0	0.0	0.0	0.0	1.89	0.08	0.0	0.0	0.0	0.0	0.0	0.0		
13	0.0	0.01	0.0	0.12	0.07	0.0	0.61	0.0	0.23	0.0	0.03	0.0		
14	0.0	0.01	0.0	0.0	0.04	0.0	1.16	0.0	1.89	0.0	0.0	0.0		
15	0.0	0.0	0.0	0.05	0.0	0.43	0.0	0.0	0.51	0.0	0.0	0.0		
16	0.0	0.0	0.0	0.0	0.0	0.54	0.0	0.0	0.38	0.0	0.0	0.06		
17	0.01	0.0	0.0	0.0	0.0	0.20	0.0	1.00	0.11	0.0	0.0	0.0		
18	0.01	0.0	0.08	0.78	0.0	0.0	0.43	0.0	0.0	0.0	0.0	0.0		
19	0.0	0.0	0.22	0.24	0.0	0.02	0.0	0.0	0.0	0.0	0.25	0.0		
20	0.0	0.0	0.0	0.0	0.0	0.02	0.0	0.0	0.0	0.0	0.0	0.0		
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.67	0.0	0.04	0.0	0.0		
22	0.0	0.0	0.0	0.16	0.04	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.47	0.94	0.0	0.0		
24	0.0	0.0	0.0	0.0	0.09	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
25	0.0	0.0	0.03	0.0	0.0	0.02	0.0	0.0	0.07	0.0	0.0	0.0		
26	0.0	0.0	0.0	0.0	0.0	0.0	0.81	0.0	0.0	0.54	0.0	0.0		
27	0.0	0.0	0.0	0.0	0.0	0.0	0.40	0.0	0.0	0.0	0.0	0.0		
28	0.0	0.24	0.0	0.0	0.02	0.0	1.13	0.0	0.0	0.0	0.0	0.0		
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
30	0.0	0.0	0.0	0.37	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
31	0.0	0.0	0.0	0.0	0.02	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
TOTAL	0.02	0.26	0.82	3.38	2.66	2.10	4.62	4.15	4.45	4.44	1.36	0.51		
STA AV	0.46	0.53	0.93	3.47	3.89	6.93	3.67	3.45	4.75	2.93	0.77	0.81		

NOTES: Daily precipitation amounts are Thiessen weighted average values from stations 111, 112 and 113 for period of April 1 through November 3, and from 113 for remainder of year. STA AV based on 7 yr record period.

TREYNOR, IOWA WATERSHED 4												
1970	MEAN DAILY DISCHARGE (cfs)											
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.073	0.094	0.094	0.083	0.065	0.094	0.064	0.054	0.039	0.037	0.054	0.073
2	0.073	0.094	0.096	0.083	0.064	0.094	0.064	0.098	0.044	0.037	0.054	0.073
3	0.073	0.094	0.099	0.083	0.064	0.094	0.064	0.066	0.043	0.039	0.054	0.073
4	0.073	0.094	0.094	0.083	0.064	0.094	0.064	0.054	0.039	0.039	0.054	0.073
5	0.073	0.094	0.094	0.083	0.064	0.094	0.064	0.054	0.039	0.039	0.054	0.073
6	0.073	0.094	0.086	0.083	0.064	0.094	0.064	0.054	0.039	0.039	0.054	0.073
7	0.073	0.094	0.083	0.083	0.058	0.094	0.064	0.054	0.039	0.042	0.054	0.073
8	0.073	0.094	0.083	0.083	0.064	0.094	0.064	0.054	0.037	0.062	0.063	0.073
9	0.073	0.094	0.083	0.083	0.074	0.094	0.064	0.054	0.042	0.080	0.089	0.073
10	0.073	0.094	0.083	0.083	0.073	0.094	0.064	0.054	0.039	0.054	0.073	0.077
11	0.073	0.094	0.083	0.104	0.074	0.100	0.064	0.050	0.039	0.054	0.073	0.073
12	0.073	0.094	0.083	0.098	0.211	0.094	0.064	0.050	0.039	0.054	0.073	0.073
13	0.068	0.054	0.083	0.089	0.078	0.094	0.071	0.050	0.039	0.054	0.073	0.073
14	0.064	0.094	0.083	0.073	0.073	0.094	0.096	0.050	0.072	0.054	0.073	0.073
15	0.064	0.094	0.083	0.073	0.073	0.097	0.094	0.050	0.057	0.054	0.073	0.073
16	0.064	0.094	0.083	0.073	0.073	0.099	0.068	0.049	0.049	0.054	0.073	0.073
17	0.064	0.094	0.083	0.073	0.073	0.094	0.064	0.062	0.046	0.054	0.073	0.073
18	0.064	0.094	0.083	0.079	0.074	0.094	0.064	0.050	0.039	0.054	0.073	0.073
19	0.064	0.094	0.086	0.079	0.076	0.094	0.064	0.054	0.039	0.054	0.077	0.073
20	0.064	0.094	0.083	0.073	0.076	0.094	0.059	0.050	0.039	0.054	0.073	0.073
21	0.064	0.094	0.083	0.073	0.077	0.054	0.054	0.053	0.039	0.054	0.073	0.073
22	0.064	0.094	0.083	0.074	0.077	0.094	0.054	0.052	0.039	0.054	0.073	0.073
23	0.064	0.094	0.083	0.068	0.083	0.083	0.054	0.047	0.045	0.073	0.068	0.073
24	0.064	0.094	0.083	0.064	0.082	0.073	0.054	0.047	0.040	0.054	0.064	0.073
25	0.064	0.088	0.083	0.064	0.083	0.073	0.054	0.047	0.039	0.054	0.064	0.073
26	0.064	0.083	0.083	0.064	0.077	0.073	0.084	0.047	0.039	0.061	0.064	0.073
27	0.107	0.083	0.083	0.064	0.078	0.073	0.064	0.043	0.039	0.059	0.064	0.073
28	0.276	0.085	0.083	0.058	0.094	0.073	0.067	0.039	0.036	0.054	0.064	0.073
29	0.095		0.083	0.058	0.094	0.068	0.054	0.039	0.031	0.054	0.068	0.073
30	0.094		0.083	0.069	0.094	0.064	0.054	0.039	0.034	0.054	0.073	0.073
31	0.094		0.083		0.094		0.054	0.039		0.054		0.073
MEAN	0.0768	0.0927	0.0852	0.0767	0.0797	0.0888	0.0644	0.0518	0.0413	0.0527	0.0671	0.0731
INCHES	0.388	0.412	0.419	0.365	0.392	0.423	0.317	0.255	0.197	0.259	0.319	0.360
STA AV	0.410	0.425	0.614	0.476	0.539	1.047	0.835	0.553	0.554	0.544	0.485	0.443

NOTES: To convert mean daily discharge in CFS to IN/DAY, multiply by 0.15868. STA AV based on 7 yr record period.

1970	SELECTED RUNOFF EVENT					TREYNOR, IOWA WATERSHED 4					
ANTECEDENT CONDITIONS			RAINFALL				RUNOFF				
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.	
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)	
EVENT OF AUGUST 2 - 3, 1970											
RG 000113			RG 000113								
8- 2	0.54	0.010	8- 2	2133	0.0	0.0	8- 2	2142	0.054	0.0	
				2138	1.0799	0.09		2146	0.215	0.0001	
				2143	5.0403	0.51		2152	0.395	0.0003	
				2149	5.0997	1.02		2200	0.548	0.0007	
				2154	2.7602	1.25		2206	0.693	0.0011	
WATERSHED CONDITIONS:											
82% Contoured corn above				2208	1.2000	1.53		2210	0.951	0.0015	
level terraces; 7% contoured				2232	0.0750	1.56		2212	1.201	0.0018	
corn below terraces, all corn				2257	0.1680	1.63		2214	1.320	0.0021	
8 ft. tall, milk stage, 90%				2314	0.0353	1.64		2217	1.320	0.0025	
canopy; 10% grassed terrace								2222	1.101	0.0032	
backslopes, broom grass 12 in.											
tall; 1% gullies.								2226	0.731	0.0036	
								2233	0.514	0.0041	
								2238	0.395	0.0044	
								2243	0.319	0.0046	
								2251	0.295	0.0049	
								2306	0.215	0.0053	
								2320	0.147	0.0056	
								2334	0.132	0.0058	
								2400	0.104	0.0061	
								8- 3	300	0.073	
										0.0079	

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.00661. Event precipitation totals for rain gages 111 and 112 are 1.44 and 1.46 in., respectively and the Thiessen average event precipitation is 1.50 in.

COTTONWOOD, SOUTH DAKOTA WATERSHED N-1

LOCATION: Jackson County, South Dakota; approximately 3 miles east southeast of Cottonwood, Bad River Basin.

AREA: 2.35 acres

MONTHLY PRECIPITATION AND RUNOFF (inches)														COTTONWOOD, SOUTH DAKOTA WATERSHED N-1											
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual											
1970	P	0.40	0.21	0.64	2.03	1.03	1.09	2.96	1.37	1.72	0.48	0.76	6.31	13.00											
	Q	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
STA AV	P	0.29	0.27	0.61	1.95	2.58	3.67	1.80	1.26	1.29	0.52	0.28	0.42	14.93											
	Q	0.0	0.0	0.372	0.0	0.169	0.234	0.010	0.002	0.0	0.0	0.0	0.0	0.787											
ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																									
		Maximum Discharge Date	Rate	1 Hour Date	Vol.	2 Hours Date	Vol.	6 Hours Date	Vol.	12 Hours Date	Vol.	1 Day Date	Vol.	2 Days Date	Vol.	8 Days Date	Vol.								
1970		0-0	0.0	0-0	0.0	0-0	0.0	0-0	0.0	0-0	0.0	0-0	0.0	0-0	0.0	0-0	0.0								
MAXIMUMS FOR PERIOD OF RECORD																									
		5-30	2.030	5-30	0.710	5-30	0.760	5-30	1.122	5-30	1.122	5-30	1.122	3-8	1.538	3-8	1.913								
		1963		1963		1963		1963		1963		1963		1966		1966									

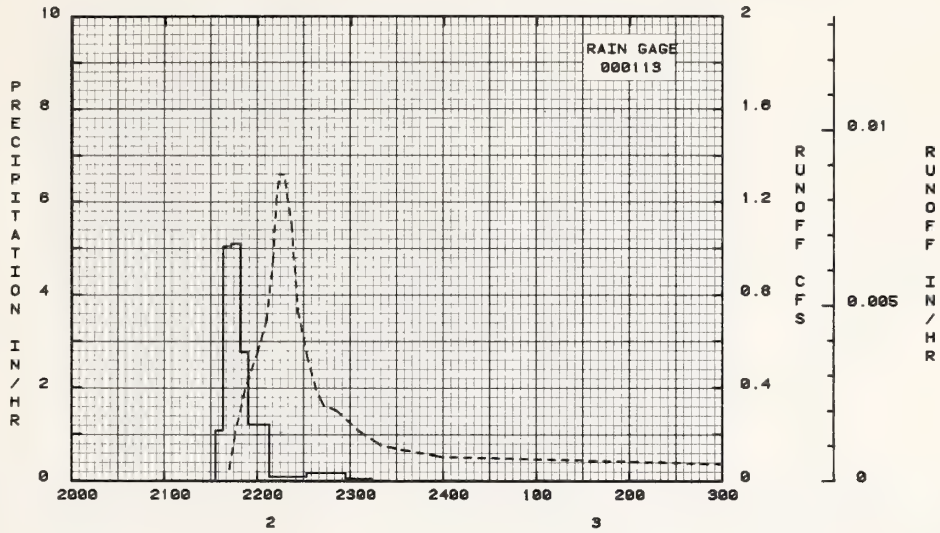
NOTES: Watershed conditions: 100% moderately grazed rangeland. Vegetative cover in late July was 1948 lbs./acre (oven-dry weight). For map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1965, USDA Misc. Pub. 1216, p. 72.5-7. Arithmetic mean of rain gages RM-1, RM-2, RM-3 and RM-4. Precipitation and runoff records began January 1963. Precipitation and runoff STA AV based on 8 yr record period. No runoff during 1970. For long-time precipitation records, see National Weather Service records at Cottonwood, South, Dakota.

1970 DAILY AIR TEMPERATURE (degrees F)														COTTONWOOD, SOUTH DAKOTA WATERSHED N-1											
Day	Jan		Feb		Mar		Apr		May		Jun		Jul		Aug		Sep		Oct		Nov		Dec		
	max	min	max	min	max	min	max	min	max	min	max	min	max	min	max	min	max	min	max	min	max	min	max	min	
1	28	9	45	12	29	24	48	11	60	30	73	41	96	48	91	63	101	72	85	38	38	23	56	27	
2	23	8	16	-4	47	27	54	30	76	34	80	37	95	50	90	57	98	69	84	39	34	29	51	21	
3	28	0	46	13	37	17	47	19	78	37	80	45	93	53	81	56	88	53	78	27	34	28	42	20	
4	19	-3	46	19	37	14	64	15	61	32	76	38	88	46	93	54	101	54	90	36	35	22	60	19	
5	11	-15	47	14	51	18	65	37	80	39	85	40	97	53	92	69	96	71	89	36	59	14	37	13	
6	11	-11	46	9	62	12	76	23	85	50	89	45	98	53	92	68	95	56	86	45	59	31	44	11	
7	6	-8	46	23	68	13	84	42	88	43	94	45	98	64	97	67	87	54	48	29	47	27	56	19	
8	3	-19	46	15	59	30	59	27	81	47	91	62	97	51	95	62	92	56	49	29	40	30	56	26	
9	26	-24	62	9	35	9	67	22	54	40	93	58	96	64	90	56	88	49	48	20	56	31	42	20	
10	35	4	49	15	20	-10	76	23	68	33	80	58	88	62	88	59	78	37	45	26	52	31	23	13	
11	36	18	46	25	34	-12	68	40	73	45	76	43	97	62	98	62	83	46	64	25	37	28	24	-14	
12	22	-4	35	9	30	-6	49	28	73	48	72	56	96	62	101	58	74	40	78	30	40	26	36	6	
13	8	-9	26	1	26	-6	36	26	69	45	76	49	96	68	105	55	48	33	68	35	34	29	31	4	
14	18	-8	35	11	29	3	35	28	49	42	86	61	87	65	103	57	45	38	52	32	38	22	18	-7	
15	16	-3	34	21	25	2	38	31	66	34	83	48	87	51	92	58	64	41	58	18	55	18	33	3	
16	10	-8	61	20	41	18	40	20	80	36	84	46	99	53	96	49	64	38	71	22	61	21	39	3	
17	1	-11	69	29	39	20	38	22	91	45	85	50	99	58	102	61	80	37	72	25	55	33	34	6	
18	-3	-20	51	5	34	22	32	30	90	48	77	47	98	58	100	56	90	43	65	21	45	21	27	6	
19	14	-34	31	-4	36	18	37	30	74	44	86	50	81	60	92	60	95	56	71	34	45	20	8	-16	
20	12	-10	44	-1	39	12	37	29	83	48	83	52	83	54	90	42	90	48	70	31	46	19	2	-22	
21	25	-3	52	22	48	18	44	24	78	50	82	43	92	58	95	62	85	39	73	32	41	21	11	-9	
22	44	3	52	26	43	29	42	29	67	47	96	51	90	67	91	47	70	35	69	24	24	4	14	-9	
23	53	22	55	24	53	22	54	30	76	48	94	59	86	60	94	48	79	39	64	41	24	2	19	-11	
24	53	24	46	26	51	32	64	32	76	50	86	50	92	54	101	57	69	40	75	32	51	17	19	1	
25	41	31	52	16	43	27	66	35	74	36	95	61	101	63	101	58	59	38	63	24	58	27	31	-6	
26	45	24	54	26	46	14	64	36	87	34	92	50	93	61	109	53	70	30	48	17	29	19	39	8	
27	59	28	44	29	39	2	64	34	85	43	106	50	91	57	101	59	75	39	46	23	36	18	16	-6	
28	47	20	34	23	50	7	60	41	74	53	104	68	98	61	86	61	81	37	41	30	54	17	19	-8	
29	39	10			46	11	61	36	78	40	100	79	98	61	99	59	86	34	34	30	62	25	40	-2	
30	47	17			42	16	57	30	79	52	97	68	99	59	98	58	86	35	39	26	65	31	37	17	
31	51	14			38	24			67	49			97	58	100	56			38	19			42	23	
AV.	27	1	45	15	41	14	54	29	75	43	87	52	94	58	96	58	81	45	63	29	45	23	33	5	
MEAN	14.1		30.5		27.9		41.5		59.1		69.3		75.9		76.7		62.9		46.1		34.0		18.8		
STA AV	32	6	36	9	45	18	61	32	71	42	81	52	91	59	89	55	79	46	65	33	49	20	36	10	

NOTES: Temperature data from National Weather Service records at Cottonwood, South Dakota for 24 hour period ending a 1700. STA AV based on 61 yr (1910-70) record period.

1970 DAILY PRECIPITATION (inches) COTTONWOOD, SOUTH SAKOTA WATERSHED M-1												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.02S	0.0	0.0	0.0	0.0	0.01	0.0	0.0	0.0	0.0	0.0	0.0
2	0.01S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.02	0.0	0.05S	0.0
3	0.01S	0.02S	0.0	0.0	0.0	0.0	0.0	0.0	0.08	0.0	0.0	0.0
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.0	0.0	0.06	0.30	0.0	0.0	0.0	0.0
6	0.0	0.0	0.0	0.0	0.0	0.01	0.0	0.0	0.25	0.14S	0.0	0.0
7	0.0	0.0	0.0	0.0	0.05	0.0	0.03	0.0	0.74	0.08S	0.16S	0.0
8	0.0	0.0	0.13S	0.0	0.02	0.0	0.0	0.0	0.0	0.01S	0.24S	0.0
9	0.0	0.0	0.26S	0.0	0.0	0.0	1.77	0.85	0.0	0.0	0.03S	0.04S
10	0.0	0.0	0.0	0.0	0.17	0.07	0.0	0.0	0.0	0.0	0.01S	0.20S
11	0.0	0.0	0.0	0.29	0.01	0.30	0.0	0.0	0.0	0.0	0.0	0.01S
12	0.0	0.0	0.01S	0.34	0.0	0.48	0.0	0.0	0.0	0.06S	0.0	0.02S
13	0.0	0.03S	0.02S	0.0	0.26	0.0	0.0	0.0	0.54S	0.01S	0.05S	0.0
14	0.0	0.0	0.02S	0.24	0.07	0.0	0.0	0.14	0.09S	0.0	0.0	0.0
15	0.0	0.0	0.0	0.36	0.0	0.03	0.0	0.07	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.03S	0.09S	0.05S	0.29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	0.08S	0.06S	0.03S	0.37	0.0	0.0	0.49	0.0	0.0	0.01S	0.02S	0.03S
19	0.0	0.01S	0.03S	0.01	0.0	0.0	0.0	0.0	0.0	0.02S	0.0	0.0
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.0	0.01	0.03	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.07	0.03	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	0.0	0.0	0.0	0.0	0.0	0.0	0.61	0.0	0.0	0.0	0.0	0.0
24	0.25S	0.0	0.0	0.0	0.08	0.19	0.0	0.0	0.0	0.0	0.0	0.01S
25	0.0	0.0	0.02S	0.0	0.0	0.0	0.0	0.0	0.0	0.01S	0.12S	0.0
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.02S	0.04S	0.0
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.01	0.0	0.01S	0.01S	0.0
28	0.0	0.0	0.03S	0.03	0.0	0.0	0.0	0.0	0.0	0.03S	0.0	0.0
29	0.0		0.04S	0.0	0.02	0.0	0.0	0.0	0.0	0.08S	0.0	0.0
30	0.0		0.0	0.0	0.27	0.0	0.0	0.0	0.0	0.0	0.03S	0.0
31	0.0		0.0		0.02		0.0	0.0		0.0		0.0
TOTAL	0.40	0.21	0.64	2.03	1.03	1.09	2.96	1.37	1.72	0.48	0.76	0.31
STA AV	0.29	0.27	0.61	1.95	2.58	3.67	1.80	1.26	1.29	0.52	0.28	0.42

NOTES: Arithmetic mean of rain gages RM-1, RM-2, RM-3 and RM-4. STA AV based on 8 yr (1963-70) record period.



EVENT OF AUGUST 2 - 3, 1970
TREYNOR, IOWA WATERSHED 4

TREYNOR, IOWA WATERSHED 5

LOCATION: Pottawattamie County, Iowa; approximately 9 miles southeast of Treynor and 3 miles southwest of Macedonia; West Nishnabotna River, Missouri River Basin.

AREA: 389.00 acres

MONTHLY PRECIPITATION AND RUNOFF (inches)													TREYNOR, IOWA WATERSHED 5	
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual	
1970	P 0.04	0.30	0.69	3.98	2.45	2.51	4.38	3.46	3.92	4.43	1.19	0.30	27.65	
	Q 0.279	0.220	0.245	0.316	0.351	0.222	0.219	0.186	0.125	0.216	0.209	0.142	2.729	
STA AV	P 0.47	0.53	1.19	3.30	3.27	6.46	3.35	3.62	4.27	2.47	0.92	0.89	30.72	
	Q 0.268	0.358	0.572	0.339	0.336	1.081	0.522	0.323	0.436	0.317	0.279	0.257	5.089	
ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS														
	Maximum Discharge		1 Hour		2 Hours		6 Hours		12 Hours		1 Day		2 Days	
	Date	Rate	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.
1970	8-2	0.029	8-2	0.022	8-2	0.032	8-2	0.041	8-2	0.042	8-2	0.053	5-12	0.083
													1-25	0.141
MAXIMUMS FOR PERIOD OF RECORD														
	6-20	1.250	6-20	0.890	6-20	1.271	6-20	1.529	6-20	1.575	6-20	1.636	6-20	1.744
	1967		1967		1967		1967		1967		1967		1967	1967

NOTES: Watershed conditions: Percent crop distribution of area above or below level terraces, respectively is: corn, 34 and 4; beans, 18 and 2; small grain, 4 and 0; hay and clover, 8 and 0; pasture, 18 and 8; and roads and farmsteads, 1 and 3. Precipitation: Before April 5 and after November 3 arithmetic average of rain gages 101 and 108; Thiessen average of seven recording rain gages for remainder of year. Precipitation and runoff records began February 6, 1963. January 1 to February 6, 1963 precipitation and runoff estimated and included in average. For daily air temperature, in the vicinity, see table for Watershed 3 (71.003). For topographic map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1964, USDA Misc. Pub. 1154, p. 71.5-6. For long-time precipitation records, see National Weather Service records at Omaha, Nebraska.

1970 DAILY PRECIPITATION (inches)													TREYNOR, IOWA WATERSHED 5	
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
1	0.0	0.0	0.08	0.0	0.0	0.0	0.0	0.12	0.0	0.0	0.0	0.0		
2	0.0	0.0	0.17	0.0	0.0	0.0	0.0	1.91	0.23	0.0	0.05	0.0		
3	0.0	0.0	0.05	0.0	0.0	0.0	0.11	0.0	0.0	0.0	0.13	0.0		
4	0.0	0.0	0.0	0.0	0.04	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
5	0.0	0.0	0.0	0.0	0.02	0.0	0.0	0.0	0.05	0.0	0.0	0.0		
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.46	0.0	0.0		
8	0.0	0.0	0.0	0.0	0.05	0.0	0.0	0.0	0.0	1.28	0.41	0.0		
9	0.0	0.0	0.05	0.0	0.15	0.0	0.0	0.0	0.19	0.79	0.18	0.0		
10	0.0	0.0	0.0	0.0	0.0	0.08	0.0	0.0	0.0	0.0	0.0	0.22		
11	0.0	0.0	0.0	2.09	0.09	0.61	0.0	0.0	0.0	0.12	0.0	0.0		
12	0.0	0.0	0.0	0.04	1.17	0.09	0.0	0.0	0.0	0.0	0.0	0.0		
13	0.0	0.03	0.0	0.20	0.84	0.0	0.83	0.0	0.30	0.0	0.03	0.0		
14	0.0	0.01	0.0	0.0	0.03	0.0	1.26	0.0	1.74	0.0	0.0	0.0		
15	0.0	0.0	0.0	0.07	0.0	0.76	0.0	0.0	0.31	0.0	0.0	0.0		
16	0.0	0.0	0.0	0.0	0.0	0.50	0.0	0.0	0.14	0.0	0.0	0.08		
17	0.02	0.0	0.0	0.0	0.0	0.43	0.0	0.58	0.09	0.0	0.0	0.0		
18	0.02	0.0	0.05	0.77	0.0	0.0	0.42	0.0	0.0	0.0	0.02	0.0		
19	0.0	0.0	0.25	0.41	0.0	0.02	0.0	0.0	0.0	0.0	0.37	0.0		
20	0.0	0.0	0.0	0.0	0.0	0.03	0.0	0.0	0.0	0.0	0.0	0.0		
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.85	0.0	0.04	0.0	0.0		
22	0.0	0.0	0.0	0.06	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.38	0.78	0.0	0.0		
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
25	0.0	0.0	0.04	0.0	0.0	0.02	0.0	0.0	0.49	0.0	0.0	0.0		
26	0.0	0.0	0.0	0.0	0.0	0.0	0.23	0.0	0.0	0.96	0.0	0.0		
27	0.0	0.0	0.0	0.0	0.0	0.0	1.05	0.0	0.0	0.0	0.0	0.0		
28	0.0	0.26	0.0	0.0	0.0	0.0	0.48	0.0	0.0	0.0	0.0	0.0		
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
30	0.0	0.0	0.0	0.34	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
TOTAL	0.04	0.30	0.69	3.98	2.45	2.51	4.38	3.46	3.92	4.43	1.19	0.30		
STA AV	0.47	0.53	1.19	3.30	3.27	6.46	3.35	3.62	4.27	2.47	0.92	0.89		

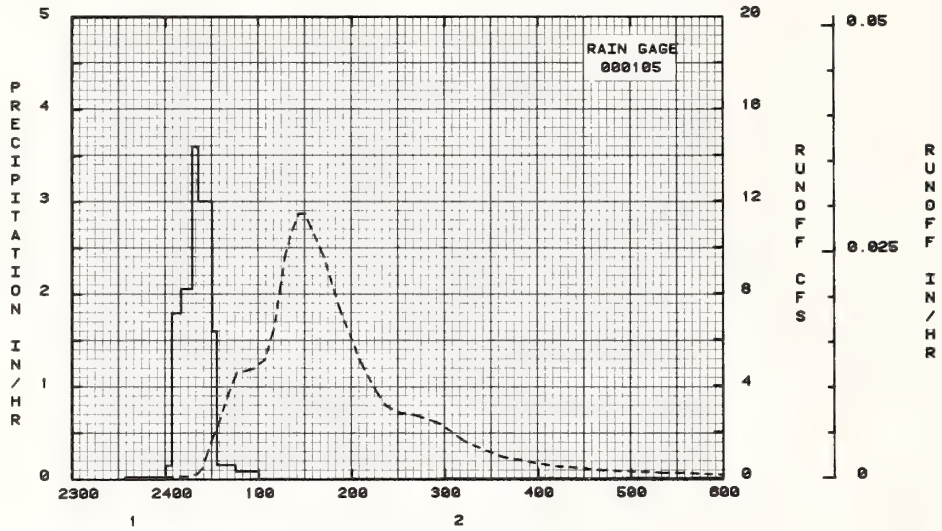
NOTES: Daily precipitation amounts are Thiessen weighted average values from seven stations (101 through 107) for period of April 1 through November 3 and are arithmetic averages from stations 101 and 108 for remainder of the year. STA AV based on 8 yr record period.

TREYNOR, IOWA WATERSHED 5												
1970	MEAN DAILY DISCHARGE (cfs)											
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.102	0.218	0.153	0.122	0.190	0.130	0.075	0.068	0.047	0.039	0.086	0.100
2	0.102	0.170	0.191	0.122	0.158	0.115	0.075	0.065	0.054	0.031	0.098	0.086
3	0.102	0.098	0.211	0.112	0.154	0.114	0.084	0.187	0.056	0.031	0.114	0.086
4	0.102	0.109	0.169	0.102	0.152	0.115	0.080	0.075	0.045	0.035	0.094	0.086
5	0.102	0.122	0.153	0.102	0.152	0.107	0.081	0.082	0.057	0.039	0.086	0.072
6	0.102	0.128	0.141	0.102	0.147	0.106	0.094	0.086	0.046	0.045	0.086	0.059
7	0.102	0.153	0.141	0.094	0.172	0.106	0.094	0.076	0.031	0.052	0.086	0.070
8	0.102	0.153	0.141	0.086	0.150	0.107	0.083	0.078	0.040	0.409	0.113	0.100
9	0.102	0.141	0.131	0.086	0.170	0.109	0.080	0.086	0.049	0.526	0.232	0.075
10	0.102	0.141	0.122	0.086	0.136	0.094	0.086	0.077	0.041	0.090	0.102	0.071
11	0.102	0.141	0.122	0.360	0.133	0.102	0.076	0.068	0.037	0.095	0.102	0.071
12	0.102	0.131	0.122	0.455	0.704	0.112	0.077	0.066	0.035	0.094	0.102	0.071
13	0.102	0.122	0.112	0.176	0.656	0.122	0.166	0.060	0.049	0.086	0.102	0.071
14	0.102	0.122	0.094	0.165	0.226	0.122	0.634	0.054	0.406	0.086	0.094	0.071
15	0.102	0.122	0.086	0.167	0.178	0.131	0.112	0.053	0.128	0.062	0.096	0.071
16	0.102	0.122	0.104	0.131	0.162	0.375	0.091	0.059	0.069	0.074	0.120	0.071
17	0.102	0.129	0.122	0.122	0.154	0.244	0.082	0.115	0.071	0.071	0.122	0.071
18	0.102	0.130	0.122	0.426	0.159	0.122	0.120	0.075	0.059	0.071	0.122	0.071
19	0.102	0.088	0.129	0.418	0.147	0.115	0.116	0.059	0.059	0.078	0.162	0.071
20	0.102	0.086	0.130	0.202	0.144	0.111	0.095	0.055	0.049	0.086	0.111	0.071
21	0.102	0.105	0.122	0.182	0.126	0.100	0.086	0.153	0.043	0.086	0.102	0.071
22	0.102	0.127	0.122	0.177	0.133	0.107	0.086	0.087	0.047	0.086	0.071	0.071
23	0.121	0.124	0.122	0.165	0.141	0.105	0.086	0.066	0.083	0.217	0.047	0.071
24	0.141	0.127	0.122	0.137	0.139	0.102	0.086	0.064	0.058	0.086	0.074	0.071
25	0.141	0.120	0.122	0.130	0.135	0.098	0.086	0.058	0.142	0.086	0.172	0.071
26	0.211	0.122	0.122	0.130	0.155	0.094	0.086	0.049	0.054	0.392	0.152	0.071
27	0.177	0.122	0.122	0.146	0.136	0.102	0.150	0.047	0.047	0.107	0.149	0.071
28	0.782	0.124	0.093	0.147	0.134	0.102	0.280	0.047	0.049	0.086	0.122	0.071
29	0.277		0.112	0.141	0.140	0.081	0.071	0.037	0.042	0.086	0.137	0.071
30	0.259		0.122	0.172	0.134	0.082	0.067	0.032	0.041	0.086	0.158	0.078
31	0.213		0.122		0.133		0.068	0.044		0.086		0.086
MEAN	0.1473	0.1285	0.1290	0.1721	0.1852	0.1211	0.1153	0.0978	0.0679	0.1138	0.1138	0.0748
INCHES	0.279	0.220	0.245	0.316	0.351	0.222	0.219	0.186	0.125	0.216	0.209	0.142
STA AV	0.268	0.358	0.572	0.339	0.336	1.081	0.522	0.323	0.436	0.317	0.279	0.257

NOTES: To convert mean daily discharge in CFS to IN/DAY, multiply by 0.06119. STA AV based on 8 yr record period.

TREYNOR, IOWA WATERSHED 5												
1970 SELECTED RUNOFF EVENT												
ANTECEDENT CONDITIONS			RAINFALL			RUNOFF						
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.		
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)		
EVENT OF AUGUST 1 - 2, 1970												
RG 000105			RG 000105									
8- 1	0.12	0.004	8- 1	2334	0.0	0.0	8- 1	2400	0.086	0.0		
				2400	0.0231	0.01	8- 2	14	0.122	0.0001		
			8- 2	4	0.1500	0.02		20	0.216	0.0001		
				10	1.8000	0.20		24	0.502	0.0002		
				17	2.0571	0.44		26	1.004	0.0003		
WATERSHED CONDITIONS:												
Percent of Watershed In:					21	3.6000	0.68	30	1.749	0.0005		
Above Below					30	3.0000	1.13	34	2.361	0.0008		
Terraces Terraces					33	1.6000	1.21	40	3.601	0.0015		
Corn	34	4		45	0.1500	1.24		46	4.605	0.0026		
Beans	18	2		100	0.0800	1.26		57	4.793	0.0048		
Small Grain	4	0										
Alfalfa and								104	5.182	0.0063		
Clover	8	0						110	6.511	0.0078		
Pasture	18	6						114	8.229	0.0090		
Roads and								117	9.614	0.0102		
Farmstead	1	3						122	10.834	0.0123		
Crops Heights: Corn, 8 ft. tall, milkstage, 90% canopy;								126	11.485	0.0142		
Soybeans, 2 ft. tall, 80% canopy; small grain, harvested; alfalfa and clover								130	11.485	0.0163		
hay, 18-24 in., 95% canopy;								134	10.834	0.0182		
pasture, 6-10 in., 60-90% canopy.								142	9.614	0.0217		
								152	7.394	0.0253		
								206	4.985	0.0290		
								216	3.750	0.0309		
								222	3.150	0.0318		
								230	2.852	0.0328		
								242	2.722	0.0342		
								257	2.361	0.0358		
								314	1.549	0.0372		
								336	0.941	0.0384		
								407	0.545	0.0394		
								440	0.341	0.0400		
								520	0.216	0.0405		

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.002549. Event precipitation totals for rain gages 101, 102, 103, 104, 106 and 107 are 1.21, 1.20, 1.30, 1.17, 1.22 and 1.16, respectively and the Thiessen average event precipitation is 1.20 in.



EVENT OF AUGUST 1 - 2, 1970

TREYNOR, IOWA WATERSHED 5

COTTONWOOD, SOUTH DAKOTA WATERSHED H-2

LOCATION: Jackson County, South Dakota; approximately 3 miles east southeast of Cottonwood, Bad River Basin.

AREA: 2.13 acres

MONTHLY PRECIPITATION AND RUNOFF (inches)														COTTONWOOD, SOUTH DAKOTA WATERSHED 6-2															
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual															
1970	P	0.37	0.18	0.58	1.85	0.97	1.10	3.03	1.36	1.74	0.45	0.74	0.27	12.64															
	Q	0.0	0.0	0.0	0.092	0.0	0.0	0.002	0.0	0.0	0.0	0.0	0.0	0.094															
STA AV	P	0.27	0.28	0.61	1.92	2.56	3.66	1.79	1.26	1.32	0.49	0.26	0.41	14.82															
	Q	0.068	0.0	0.284	0.016	0.167	0.352	0.053	0.013	0.013	0.0	0.0	0.0	0.966															
ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																													
		Maximum Discharge		1 Hour		2 Hours		Maximum Volume for Selected Time Interval		6 Hours		12 Hours		1 Day		2 Days		8 Days											
		Date	Rate	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.										
1970		4-25	0.025	4-25	0.023	4-25	0.043	4-25	0.072	4-25	0.077	4-24	0.078	4-23	0.086	4-17	0.092												
MAXIMUMS FOR PERIOD OF RECORD																													
		5-30	3.577	5-30	0.608	5-30	0.629	5-30	1.129	5-30	1.129	5-30	1.129	3-17	1.462	3-11	1.571												
		1963		1963		1963		1963		1963		1963		1969		1969													

NOTES: Watershed conditions: 100% heavily grazed rangeland. Vegetative cover in late July was 2245 lbs./acre (oven-dry weight). For map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1965, USDA Misc. Pub. 1216, p. 72.1-5. For temperature information, see table of maximum and minimum values included for Watershed 72.005. Arithmetic mean of rain gages RH-1, RH-2, RH-3 and RH-4. Precipitation and runoff records began January 1963. Precipitation and runoff STA AV based on 8 yr record period. For long-time precipitation records, see National Weather Service records at Cottonwood, South Dakota.

1970 DAILY PRECIPITATION (inches)													
COTTONWOOD, SOUTH DAKOTA WATERSHED H-2													
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
1	0.02S	0.0	0.0	0.0	0.0	0.02	0.0	0.0	0.0	0.0	0.05S	0.0	
2	0.01S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.02	0.0	0.0	0.0	
3	0.01S	0.02S	0.03S	0.0	0.0	0.0	0.0	0.0	0.08	0.0	0.0	0.0	
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
5	0.0	0.0	0.0	0.0	0.0	0.0	0.06	0.0	0.0	0.0	0.0	0.0	
6	0.0	0.0	0.0	0.0	0.0	0.02	0.0	0.30	0.52	0.16S	0.0	0.0	
7	0.0	0.0	0.0	0.0	0.05	0.0	0.04	0.0	0.52	0.08S	0.16S	0.0	
8	0.0	0.0	0.10S	0.0	0.01	0.0	0.0	0.0	0.0	0.0	0.23S	0.0	
9	0.0	0.0	0.27S	0.0	0.0	0.0	1.69	0.78	0.0	0.0	0.02S	0.04S	
10	0.0	0.0	0.0	0.0	0.14	0.06	0.0	0.0	0.0	0.0	0.02S	0.16S	
11	0.0	0.0	0.0	0.29S	0.02	0.33	0.0	0.0	0.0	0.0	0.0	0.02S	
12	0.0	0.0	0.0	0.23S	0.0	0.45	0.0	0.0	0.0	0.0	0.0	0.01S	
13	0.0	0.04S	0.02S	0.0	0.24	0.0	0.0	0.0	0.56S	0.01S	0.04S	0.0	
14	0.0	0.0	0.0	0.22S	0.08	0.0	0.0	0.18	0.04S	0.0	0.0	0.0	
15	0.0	0.0	0.0	0.36S	0.0	0.02	0.0	0.08	0.0	0.0	0.0	0.0	
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
17	0.03S	0.06S	0.07S	0.29S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
18	0.06S	0.05S	0.03S	0.31S	0.0	0.0	0.62	0.0	0.0	0.01S	0.04S	0.0	
19	0.0	0.01S	0.03S	0.02S	0.0	0.0	0.0	0.0	0.0	0.02S	0.0	0.03S	
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
21	0.0	0.0	0.0	0.01	0.03	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
22	0.0	0.0	0.0	0.08	0.02	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
23	0.0	0.0	0.0	0.0	0.0	0.0	0.62	0.0	0.0	0.0	0.0	0.0	
24	0.24S	0.0	0.0	0.0	0.08	0.20	0.0	0.0	0.0	0.0	0.0	0.01S	
25	0.0	0.0	0.02S	0.0	0.0	0.0	0.0	0.0	0.0	0.01S	0.12S	0.0	
26	0.0	0.0	0.01S	0.0	0.0	0.0	0.0	0.0	0.0	0.02S	0.02S	0.0	
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.02	0.0	0.01S	0.04S	0.0	
28	0.0	0.0	0.04S	0.04	0.0	0.0	0.0	0.0	0.0	0.03S	0.0	0.0	
29	0.0	0.0	0.03S	0.0	0.01	0.0	0.0	0.0	0.0	0.04S	0.0	0.0	
30	0.0	0.0	0.0	0.0	0.27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
31	0.0	0.0	0.0	0.0	0.02	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
TOTAL	0.37	0.18	0.58	1.85	0.57	1.10	3.03	1.36	1.74	0.45	0.74	0.27	
STA AV	0.27	0.28	0.61	1.92	2.56	3.66	1.79	1.26	1.32	0.49	0.26	0.41	

NOTES: Arithmetic mean of rain gages RH-1, RH-2, RH-3 and RH-4. STA AV based on 8 yr (1963-70) record period.

1970 MEAN DAILY DISCHARGE (cfs) COTTONWOOD, SOUTH DAKOTA WATERSHED H-2												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	0.0	0.0	0.0	0.001	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	0.0	0.0	0.0	0.001	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.007	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MEAN	0.0	0.0	0.0	0.0003	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
INCHES	0.0	0.0	0.0	0.002	0.0	0.0	0.002	0.0	0.0	0.0	0.0	0.0
STA AV	0.068	0.0	0.284	0.016	0.167	0.352	0.053	0.013	0.013	0.0	0.0	0.0

NOTES: To convert mean daily discharge in CPS to IN/DAY, multiply by 11.1745. STA AV based on 8 yr (1963-70) record period.

COTTONWOOD, SOUTH DAKOTA WATERSHED I-2

LOCATION: Jackson County, South Dakota; approximately 3 miles east southeast of Cottonwood, Bad River Basin.

AREA: 2.38 acres

MONTHLY PRECIPITATION AND RUNOFF (inches)														COTTONWOOD, SOUTH DAKOTA WATERSHED I-2											
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual											
1970	P	0.33	0.17	0.46	1.98	1.05	1.20	2.69	1.54	1.72	0.39	0.71	0.23	12.47											
	Q	0.0	0.0	0.0	0.029	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.029											
STA AV	P	0.26	0.26	0.56	1.92	2.56	3.65	1.77	1.29	1.32	0.49	0.26	0.33	14.65											
	Q	0.0	0.0	0.316	0.004	0.034	0.246	0.004	0.0	0.0	0.0	0.0	0.0	0.604											
ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																									
		Maximum Discharge		1 Hour		2 Hours		6 Hours		12 Hours		1 Day		2 Days		8 Days		Maximum Volume for Selected Time Interval							
		Date	Date	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.
1970		4-25	0.008	4-25	0.008	4-25	0.015	4-25	0.029	4-25	0.029	4-24	0.029	4-23	0.029	4-17	0.029								
MAXIMUMS FOR PERIOD OF RECORD																									
		6-15	0.542	6-15	0.388	6-15	0.540	6-15	1.073	6-15	1.164	6-15	1.243	6-15	1.243	3-8	1.544								
		1963		1963		1963		1963		1963		1963		1963		1966									

NOTES: Watershed conditions: 100% lightly grazed rangeland. Vegetative cover in late July was 2608 lbs./acre (oven-dry weight). For map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1965, USDA Misc. Pub. 1216, p. 72.2-4. For temperature information, see table of maximum and minimum values included for Watershed 72.005. Arithmetic mean of rain gages EL-1, EL-2, EL-3 and EL-4. Precipitation and runoff records began January 1963. Precipitation and runoff STA AV based on 8 yr record period. For long-time precipitation records, see National Weather Service records at Cottonwood, South Dakota.

1970		DAILY PRECIPITATION (inches)					COTTONWOOD, SOUTH DAKOTA WATERSHED I-2						
	Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
	1	0.01S	0.0	0.0	0.0	0.0	0.01	0.0	0.0	0.01	0.0	0.0	0.0
	2	0.01S	0.0	0.02S	0.0	0.0	0.0	0.0	0.0	0.05	0.0	0.03S	0.0
	3	0.01S	0.02S	0.0	0.0	0.0	0.0	0.0	0.0	0.04	0.0	0.0	0.0
	4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	5	0.0	0.0	0.0	0.0	0.0	0.0	0.05	0.0	0.0	0.0	0.0	0.0
	6	0.0	0.0	0.0	0.0	0.0	0.04	0.0	0.26	0.27	0.12S	0.0	0.0
	7	0.0	0.0	0.0	0.0	0.05	0.0	0.04	0.0	0.72	0.09S	0.15S	0.0
	8	0.0	0.0	0.06S	0.0	0.01	0.0	0.0	0.0	0.0	0.01S	0.20S	0.0
	9	0.0	0.0	0.16S	0.0	0.0	0.0	1.69	1.08	0.0	0.0	0.02S	0.02S
	10	0.0	0.0	0.0	0.0	0.15	0.08	0.0	0.0	0.0	0.0	0.02S	0.14S
	11	0.0	0.0	0.0	0.26S	0.01	0.29	0.0	0.0	0.0	0.0	0.0	0.02S
	12	0.0	0.0	0.03S	0.31S	0.0	0.63	0.0	0.0	0.0	0.08S	0.0	0.02S
	13	0.0	0.02S	0.01S	0.0	0.24	0.0	0.0	0.0	0.56S	0.02S	0.03S	0.0
	14	0.0	0.0	0.0	0.20S	0.06	0.0	0.0	0.09	0.07S	0.0	0.0	0.0
	15	0.0	0.0	0.0	0.45S	0.0	0.03	0.0	0.10	0.0	0.0	0.0	0.0
	16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	17	0.01S	0.09S	0.04S	0.27S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	18	0.04S	0.03S	0.02S	0.39S	0.0	0.0	0.31	0.0	0.0	0.01S	0.02S	0.03S
	19	0.0	0.01S	0.02S	0.01S	0.0	0.0	0.0	0.0	0.0	0.02S	0.0	0.0
	20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	21	0.0	0.0	0.0	0.02	0.05	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	22	0.0	0.0	0.0	0.05	0.03	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	23	0.0	0.0	0.0	0.0	0.0	0.0	0.60	0.0	0.0	0.0	0.0	0.0
	24	0.24S	0.0	0.0	0.0	0.10	0.12	0.0	0.0	0.0	0.0	0.0	0.0
	25	0.01S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.01S	0.13S	0.0
	26	0.0	0.0	0.03S	0.0	0.0	0.0	0.0	0.0	0.0	0.02S	0.02S	0.0
	27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.01	0.0	0.01S	0.03S	0.0
	28	0.0	0.0	0.03S	0.02	0.0	0.0	0.0	0.0	0.0	0.0	0.01S	0.0
	29	0.0	0.04S	0.0	0.03	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	30	0.0	0.0	0.0	0.0	0.30	0.0	0.0	0.0	0.0	0.0	0.05S	0.0
	31	0.0		0.0		0.02		0.0	0.0		0.0		0.0
TOTAL		0.33	0.17	0.46	1.98	1.05	1.20	2.69	1.54	1.72	0.39	0.71	0.23
STA AV		0.26	0.26	0.56	1.92	2.56	3.65	1.77	1.29	1.32	0.49	0.26	0.33

NOTES: Arithmetic mean of rain gages EL-1, EL-2, EL-3 and EL-4. STA AV based on 8 yr (1963-70) record period.

1970 MEAN DAILY DISCHARGE (cfs) COTTONWOOD, SOUTH DAKOTA WATERSHED 1-2												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.003	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MEAN	0.0	0.0	0.0	0.0001	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
INCHES	0.0	0.0	0.0	0.0029	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
STA AV	0.0	0.0	0.316	0.004	0.034	0.246	0.004	0.0	0.0	0.0	0.0	0.0

NOTES: To convert mean daily discharge in CFS to IN/DAY, multiply by 10.0007. STA AV based on 8 yr (1963-70) record period.

AHOSKIE, NORTH CAROLINA WATERSHED W-A1

LOCATION: Hertford, Bertie, and Northampton Counties, North Carolina; approximately 3/4 mile southwest of Ahoskie; Chowan River Basin.

AREA: 36480.00 acres 57.00 sq. miles

MONTHLY PRECIPITATION AND RUNOFF (inches)															AHOSKIE, NORTH CAROLINA WATERSHED W-A1														
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual															
1970	P	2.65	3.97	3.78	4.49	2.53	4.25	8.59	1.79	2.54	3.92	1.63	2.32	42.46															
	Q	1.591	3.969	1.946	3.865	0.947	0.392	1.392	0.362	0.119	0.208	0.297	0.488	15.574															
STA AV	P	3.23	3.29	3.32	2.44	3.82	4.62	6.23	4.34	2.84	2.49	1.70	2.86	41.17															
	Q	1.866	2.431	2.756	1.282	0.962	0.843	1.329	1.252	0.321	0.516	0.219	0.884	14.660															
ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																													
		Maximum Discharge		1 Hour		2 Hours		Maximum Volume for Selected Time		Interval		2 Days		8 Days															
		Date	Rate	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.														
1970		2- 3	0.030	2- 3	0.030	2- 3	0.060	2- 3	0.190	2- 3	0.380	2- 3	0.740	2- 3	1.420	1-30	2.550												
MAXIMUMS FOR PERIOD OF RECORD																													
		10- 5	0.070	10- 5	0.070	10- 5	0.140	10- 5	0.420	10- 5	0.830	10- 5	1.650	10- 5	3.020	10- 3	4.140												
		1964		1964		1964		1964		1964		1964		1964		1964													

NOTES: Watershed conditions: Woodland, 65%; row crops, 30%; pasture, 2%; roads, urban, and homesites, 3%. For map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1965, USDA Misc. Pub. 1216, p. 75.1-8. Records of precipitation began in 1964. Records of runoff began in 1950. STA AV computed on 1965-70 data. Precipitation Thiessen weighted using 10 gages. For long-time precipitation records, see National Weather Service records at Scotland Neck, North Carolina.

1970 DAILY AIR TEMPERATURE (degrees F)													AHOSKIE, NORTH CAROLINA WATERSHED W-A1												
Day	Jan		Feb		Mar		Apr		May		Jun		Jul		Aug		Sep		Oct		Nov		Dec		
	max	min	max	min	max	min	max	min	max	min	max	min	max	min	max	min	max	min	max	min	max	min	max	min	
1	55	32	59	24	58	26	57	34	83	56	84	62	90	66	92	70	91	65	77	44	69	56	62	32	
2	47	23	63	41	62	38	75	45	80	50	85	60	90	68	92	68	83	58	76	43	66	56	73	45	
3	49	25	63	43	59	44	69	40	78	56	85	61	91	68	92	62	88	62	86	59	70	52	73	34	
4	46	20	46	14	68	42	70	35	61	49	84	60	92	72	91	69	91	72	81	48	61	46	71	41	
5	47	16	42	16	63	55	61	40	75	45	86	67	92	68	85	58	90	67	75	36	60	37	57	24	
6	42	27	52	21	58	39	63	37	75	49	86	64	83	62	84	62	89	64	79	40	64	32	51	20	
7	37	31	51	26	57	25	60	39	66	33	84	59	86	58	84	65	87	56	81	44	68	36	42	17	
8	34	12	56	24	68	40	70	30	83	44	84	50	86	56	85	60	83	52	82	51	74	34	47	15	
9	22	7	62	37	66	37	81	53	88	58	84	50	87	66	84	64	85	56	84	58	71	44	63	22	
10	32	7	54	38	57	25	80	43	88	60	87	56	88	72	78	65	90	67	85	59	74	48	68	37	
11	44	12	54	32	66	31	71	40	84	62	89	56	86	65	84	63	87	68	85	61	64	57	69	34	
12	47	30	53	29	60	42	75	40	86	62	91	60	86	65	85	57	NR	NR	82	58	67	54	74	45	
13	40	19	54	23	53	37	74	37	90	63	91	64	89	63	86	62	85	53	84	51	70	48	71	44	
14	51	19	54	26	NR	NR	69	53	91	62	84	57	88	67	88	67	89	57	86	58	68	41	50	23	
15	45	20	70	30	50	25	58	43	90	56	81	51	89	69	91	67	90	56	82	55	69	55	55	22	
16	54	17	69	34	45	25	71	42	NR	NR	88	55	90	72	90	67	92	63	77	49	58	30	52	35	
17	68	25	37	31	55	18	72	40	77	57	93	66	90	60	89	68	91	62	58	32	57	27	58	42	
18	61	45	58	32	61	37	80	51	71	44	95	68	87	57	92	68	92	68	69	28	53	30	55	27	
19	51	28	70	42	50	37	65	49	84	42	98	72	90	59	89	65	90	70	75	32	63	31	66	30	
20	31	23	63	26	52	40	84	51	90	55	97	65	90	64	90	65	84	52	79	39	72	44	63	47	
21	28	11	45	17	55	44	87	54	87	60	92	61	87	68	91	69	89	57	73	50	63	36	51	40	
22	29	3	NR	22	60	43	86	41	85	53	88	66	85	62	90	67	95	65	70	61	68	25	60	41	
23	30	10	63	NR	58	33	77	58	91	60	88	65	86	68	89	70	92	68	72	59	63	42	64	52	
24	38	22	63	23	57	34	86	60	92	64	86	57	87	70	87	70	91	63	72	52	45	17	65	44	
25	60	25	62	41	71	32	84	59	90	60	89	68	89	69	85	65	93	66	68	53	43	15	47	22	
26	68	47	48	15	75	48	76	50	83	63	87	65	90	67	85	67	92	66	70	56	56	23	44	27	
27	64	27	56	20	74	33	69	55	83	56	87	70	91	67	88	59	90	60	65	54	68	25	47	29	
28	62	28	NR	NR	74	32	75	51	84	60	85	54	91	65	89	62	66	53	64	49	72	35	42	16	
29	79	50			75	47	79	56	77	53	81	50	91	69	92	66	68	42	71	53	70	39	36	18	
30	76	39			50	34	84	51	80	55	87	57	48	68	93	61	75	40	65	57	70	42	38	16	
31	48	21			52	36			83	52			89	67	95	71			65	55			42	22	
AV.	48	23	56	28	60	36	74	46	83	55	88	61	88	66	88	65	87	60	75	50	65	39	57	31	
MEAN	35.6		42.2		48.2		59.8		68.6		74.1		77.1		76.7		73.8		62.7		51.6		43.9		
STA AV	51	28	53	31	62	37	73	46	80	54	86	61	89	66	87	64	82	58	73	47	63	37	52	30	

NOTES: Temperature data from National Weather Service records at Lewiston, North Carolina. STA AV based on 17 yr (1954-70) record period.

1970 DAILY PRECIPITATION (inches) AHOSKIE, NORTH CAROLINA WATERSHED W-A1												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	3.16	0.0	0.0	0.30	0.0	0.0	0.0	0.03	0.0	0.0	0.12	0.0
2	0.0	0.56	0.09	0.27	0.0	0.0	0.25	0.0	0.0	0.0	0.02	0.0
3	0.0	1.62	0.0	0.0	0.0	0.0	0.03	0.0	0.04	0.0	0.08	0.0
4	0.0	0.0	0.15	0.0	1.05	0.0	0.40	0.0	0.28	0.0	0.06	0.0
5	0.0	0.0	0.0	0.0	0.0	1.22	0.72	0.0	0.29	0.0	0.05	0.0
6	0.63	0.0	0.0	0.37	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7	0.12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9	0.0	0.15	0.0	0.0	0.0	0.0	0.55	0.04	0.0	0.0	0.0	0.0
10	0.06	0.05	0.0	0.0	0.0	0.0	1.02	1.19	0.0	0.0	0.81	0.0
11	0.0	0.0	0.0	0.0	0.0	0.0	0.05	0.03	0.06	0.0	0.24	0.0
12	0.0	0.0	0.16	0.0	0.0	0.0	0.0	0.0	0.07	0.0	0.03	0.0
13	0.0	0.0	0.0	0.99	0.0	0.0	0.0	0.0	0.0	0.0	0.01	0.0
14	0.0	0.0	0.0	1.25	0.0	0.0	0.32	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.03	0.0
16	0.0	0.55	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.78	0.02	1.42
17	0.30	0.65	0.0	0.0	0.10	0.0	0.0	0.08	0.0	0.04	0.0	0.03
18	0.20	0.0	0.37	0.0	0.02	0.24	0.0	0.04	0.0	0.0	0.01	0.0
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.05	0.0
20	0.0	0.0	0.39	0.16	0.0	0.01	1.04	0.0	0.0	0.0	0.10	0.0
21	0.0	0.0	0.19	0.0	0.0	0.89	0.61	0.0	0.0	0.40	0.0	0.34
22	0.0	0.0	0.67	0.0	0.0	0.05	1.32	0.0	0.0	1.53	0.0	0.01
23	0.0	0.0	0.0	0.0	0.0	0.03	1.04	0.38	0.0	0.68	0.0	0.38
24	0.0	0.0	0.0	0.0	0.0	0.01	0.03	0.0	0.0	0.05	0.0	0.0
25	0.0	0.39	0.0	0.0	0.09	0.27	0.0	0.0	0.0	0.0	0.0	0.0
26	0.06	0.0	0.42	0.94	1.27	1.53	0.0	0.0	0.0	0.0	0.0	0.0
27	0.0	0.0	0.0	0.03	0.0	0.0	0.0	0.0	1.26	0.0	0.0	0.0
28	0.0	0.0	0.0	0.18	0.0	0.0	0.0	0.0	0.53	0.0	0.0	0.0
29	0.47	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.01	0.0	0.0	0.0
30	0.65	0.09	0.0	0.0	0.0	0.0	1.06	0.0	0.0	0.19	0.0	0.0
31	0.0	1.25	0.0	0.0	0.0	0.0	0.15	0.0	0.25	0.0	0.14	0.0
TOTAL	2.65	3.97	3.78	4.49	2.53	4.25	8.59	1.79	2.54	3.92	1.63	2.32
STA AV	3.23	3.29	3.32	2.44	3.82	4.62	6.23	4.34	2.84	2.49	1.70	2.86

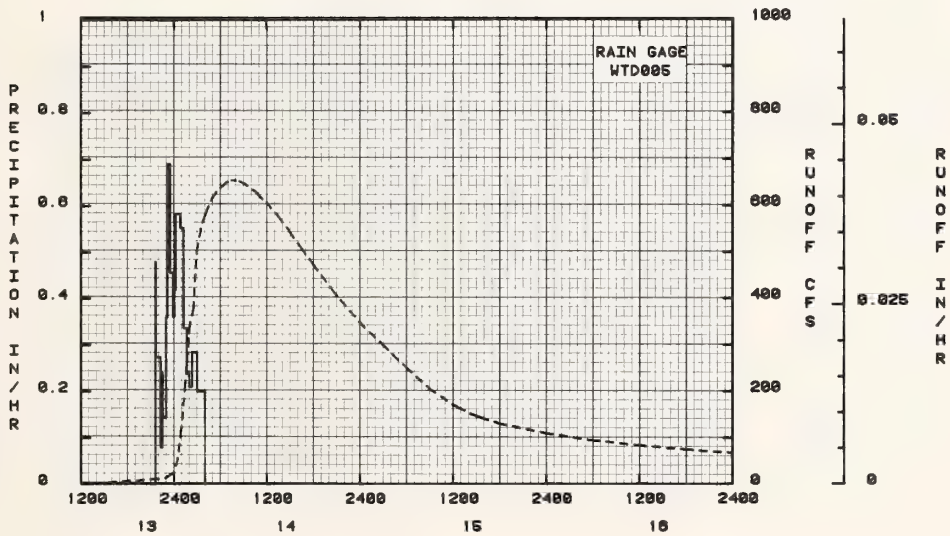
NOTES: Precipitation values are Thiessen weighted averages of 10 gages. STA AV based on 6 yr (1965-70) record period.

1970 MEAN DAILY DISCHARGE (cfs) AHOSKIE, NORTH CAROLINA WATERSHED W-A1												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	86.0	153.0	56.0	660.0	77.0	9.7	10.0	129.0	6.6	5.5	11.0	9.3
2	84.0	170.0	50.0	483.0	60.0	9.7	11.0	70.0	6.6	5.5	13.0	9.0
3	72.0	919.0	51.0	361.0	50.0	8.8	11.0	37.0	6.8	5.5	11.0	9.0
4	63.0	1100.0	49.0	204.0	106.0	8.5	9.7	23.0	7.4	4.8	10.0	9.0
5	54.0	728.0	52.0	130.0	324.0	18.0	32.0	17.0	7.4	4.8	9.3	8.6
6	57.0	302.0	55.0	93.0	174.0	128.0	31.0	15.0	6.8	4.5	9.6	9.0
7	200.0	192.0	47.0	114.0	100.0	30.0	17.0	13.0	8.0	4.5	9.0	9.0
8	161.0	138.0	41.0	92.0	72.0	20.0	12.0	13.0	6.3	4.5	8.6	9.0
9	97.0	111.0	38.0	71.0	56.0	15.0	15.0	12.0	6.0	4.5	8.3	9.0
10	69.0	133.0	36.0	57.0	44.0	13.0	30.0	13.0	5.8	4.5	9.0	9.0
11	54.0	121.0	32.0	45.0	36.0	11.0	111.0	21.0	5.8	4.5	72.0	9.0
12	53.0	108.0	31.0	38.0	30.0	10.0	45.0	22.0	5.8	4.5	41.0	9.0
13	56.0	89.0	33.0	35.0	27.0	9.4	22.0	15.0	5.8	4.5	28.0	9.0
14	53.0	69.0	33.0	851.0	24.0	9.1	16.0	13.0	5.5	4.2	22.0	8.6
15	46.0	66.0	32.0	886.0	22.0	8.8	18.0	12.0	5.5	4.2	18.0	8.6
16	43.0	64.0	29.0	371.0	22.0	8.5	14.0	11.0	5.5	6.8	16.0	13.0
17	41.0	356.0	27.0	206.0	20.0	8.2	12.0	10.0	5.5	7.7	15.0	83.0
18	78.0	342.0	29.0	140.0	20.0	8.0	11.0	9.0	5.2	5.2	14.0	47.0
19	93.0	201.0	45.0	103.0	18.0	8.0	10.0	8.5	5.0	4.8	13.0	32.0
20	76.0	136.0	53.0	88.0	16.0	7.4	15.0	8.0	5.0	4.8	13.0	26.0
21	61.0	97.0	65.0	81.0	15.0	12.0	59.0	8.0	5.0	6.3	12.0	24.0
22	46.0	81.0	377.0	71.0	14.0	26.0	79.0	8.0	5.0	8.5	12.0	33.0
23	38.0	68.0	319.0	63.0	13.0	12.0	492.0	8.0	5.0	102.0	11.0	45.0
24	34.0	60.0	175.0	59.0	13.0	9.4	459.0	8.5	5.0	29.0	11.0	82.0
25	33.0	56.0	114.0	53.0	12.0	8.8	165.0	8.2	4.8	15.0	10.0	55.0
26	37.0	80.0	95.0	52.0	16.0	90.0	79.0	8.0	4.8	12.0	10.0	43.0
27	41.0	78.0	146.0	146.0	23.0	49.0	45.0	7.5	5.5	10.0	9.6	34.0
28	38.0	65.0	109.0	138.0	14.0	19.0	29.0	7.0	9.1	9.3	9.6	29.0
29	36.0	85.0	133.0	12.0	15.0	15.0	21.0	6.8	9.7	9.0	9.6	25.0
30	282.0	72.0	99.0	11.0	11.0	11.0	22.0	6.6	6.0	8.6	9.3	22.0
31	256.0	607.0	10.0	10.0	10.0	10.0	230.0	6.6	9.0	9.0	21.0	21.0
MEAN	78.65	217.25	96.23	197.43	46.61	20.04	68.80	17.89	6.07	10.27	15.16	24.13
INCHES	1.591	3.969	1.946	3.865	0.947	0.392	1.392	0.362	0.119	0.208	0.297	0.488
STA AV	1.866	2.431	2.756	1.282	0.962	0.843	1.329	1.252	0.321	0.516	0.219	0.884

NOTES: To convert mean daily discharge in CFS to IN/DAY, multiply by 0.0006525. Runoff data furnished by U.S. Geological Survey. Records are good to fair. STA AV based on 6 yr (1965-70) record period.

1970 SELECTED RUNOFF EVENT			AHOSKIE, NORTH CAROLINA WATERSHED W-A2					
ANTECEDENT CONDITIONS			RAINFALL			RUNOFF		
Date Mo-Day	Rainfall (inches)	Runoff (inches)	Date Mo-Day	Time of Day	Intensity (in/hr)	Acc. (inches)	Date Mo-Day	Time of Day
							Rate (cfs)	Acc. (inches)
EVENT OF APRIL 13 - 18, 1970 (CONTINUED)								
				4-15			1330 158.500	0.9938
							1500 147.300	1.0086
							1630 138.200	1.0224
							1800 129.800	1.0354
							2400 109.000	1.0817
				4-16			600 94.000	1.1210
							1200 83.500	1.1554
							1800 74.500	1.1860
							2400 66.500	1.2133
				4-17			1200 54.800	1.2603
							2400 46.800	1.2997
				4-18			1200 41.200	1.3338
							2400 34.000	1.3629

NOTES: To convert CFS to IN/HR, multiply by 0.00006457. Precipitation is Thiessen average of 2 rain gages.



EVENT OF APRIL 13 - 18, 1970
AHOSKIE, NORTH CAROLINA WATERSHED W-A2

AHOSKIE, NORTH CAROLINA WATERSHED W-A3

LOCATION: Northampton County, North Carolina, approximately 3 miles southeast of Rich Square; Chowan River Basin.

AREA: 2368.00 acres 3.70 sq. miles

MONTHLY PRECIPITATION AND RUNOFF (inches)														AHOSKIE, NORTH CAROLINA WATERSHED W-A3											
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual											
1970	P	2.59	3.73	3.58	4.30	2.20	3.64	9.63	1.76	3.33	4.31	1.34	2.29	42.70											
	Q	1.252	3.076	1.710	3.100	0.412	0.045	3.120	0.755	0.012	0.040	0.025	0.040	13.587											
STA AV	P	3.31	3.25	3.15	2.48	3.88	4.75	5.57	4.37	2.85	2.63	1.73	2.92	40.87											
	Q	1.100	1.788	1.730	0.955	0.790	0.438	0.923	0.723	0.183	0.302	0.030	0.588	9.511											
ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUOFF (inches) FOR SELECTED TIME INTERVALS																									
		Maximum Discharge		1 Hour		2 Hours		Maximum Volume for Selected Time Interval								2 Days		8 Days							
		Date	Rate	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.								
1970		2- 3	0.070	2- 3	0.060	2- 3	0.130	2- 3	0.340	2- 3	0.550	2- 3	0.840	2- 3	1.070	2- 1	1.800								
MAXIMUMS FOR PERIOD OF RECORD																									
		10- 5	0.120	10- 5	0.120	10- 5	0.240	10- 5	0.670	10- 5	1.240	10- 5	1.880	10- 4	2.570	10- 4	3.490								
		1964	1964	1964	1964	1964	1964	1964	1964	1964	1964	1964	1964	1964	1964	1964	1964								

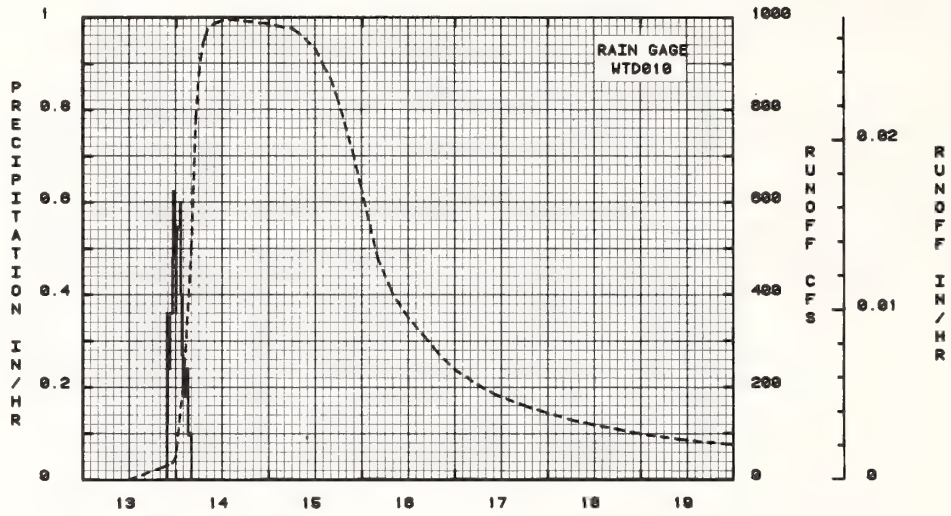
NOTES: Watershed conditions: Woodland, 88%; row crops, 10%; homesites, pastures, and roads, 2%. For map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1965, USDA Misc. Pub. 1216, p. 75.1-8. Records of precipitation and runoff began in 1964. STA AV computed on 1965-70 data. Precipitation Thiessen weighted using 2 gages. For temperature information, see table of maximum and minimum values included with data for Watershed 75.001. For long-time precipitation records, see National Weather Service records at Scotland Neck, North Carolina.

1970 DAILY PRECIPITATION (inches)														AHOSKIE, NORTH CAROLINA WATERSHED W-A3											
	Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec												
	1	0.16	0.0	0.0	0.24	0.0	0.0	0.0	0.0	0.0	0.0	0.19	0.0												
	2	0.0	0.54	0.07	0.24	0.0	0.0	0.94	0.0	0.0	0.0	0.0	0.0												
	3	0.0	1.43	0.0	0.0	0.05	0.0	0.0	0.0	0.0	0.0	0.12	0.0												
	4	0.0	0.0	0.17	0.0	0.90	0.0	0.47	0.0	0.20	0.0	0.11	0.0												
	5	0.0	0.0	0.0	0.0	0.0	0.59	0.81	0.0	0.33	0.0	0.01	0.0												
	6	0.64	0.0	0.0	0.53	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0												
	7	0.07	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0												
	8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0												
	9	0.0	0.12	0.0	0.0	0.0	0.0	0.43	0.0	0.0	0.0	0.0	0.0												
	10	0.0	0.0	0.0	0.0	0.0	0.0	0.90	1.18	0.0	0.0	0.59	0.0												
	11	0.0	0.0	0.0	0.0	0.0	0.0	0.06	0.06	0.34	0.0	0.21	0.0												
	12	0.0	0.0	0.17	0.0	0.0	0.0	0.0	0.0	0.16	0.0	0.0	0.0												
	13	0.0	0.0	0.0	0.71	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0												
	14	0.0	0.0	0.0	1.39	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0												
	15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0												
	16	0.0	0.52	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.71	0.0	1.27												
	17	0.30	0.73	0.0	0.0	0.09	0.0	0.0	0.15	0.0	0.0	0.0	0.0												
	18	0.24	0.0	0.40	0.0	0.0	0.19	0.0	0.08	0.0	0.0	0.0	0.0												
	19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.07	0.0												
	20	0.0	0.0	0.25	0.0	0.0	0.0	1.34	0.0	0.0	0.0	0.04	0.0												
	21	0.0	0.0	0.22	0.0	0.0	0.93	1.01	0.0	0.0	0.47	0.0	0.42												
	22	0.0	0.0	0.55	0.0	0.0	0.03	1.34	0.0	0.0	1.27	0.0	0.0												
	23	0.0	0.0	0.0	0.0	0.0	0.07	0.91	0.29	0.0	1.11	0.0	0.34												
	24	0.0	0.0	0.0	0.0	0.0	0.0	0.04	0.0	0.0	0.0	0.0	0.0												
	25	0.0	0.39	0.0	0.0	0.06	0.10	0.0	0.0	0.0	0.0	0.0	0.0												
	26	0.06	0.0	0.53	0.75	1.10	1.73	0.0	0.0	0.0	0.0	0.0	0.0												
	27	0.0	0.0	0.0	0.09	0.0	0.0	0.0	0.0	1.86	0.0	0.0	0.0												
	28	0.0	0.0	0.0	0.35	0.0	0.0	0.0	0.0	0.44	0.0	0.0	0.0												
	29	0.48	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0												
	30	0.64	0.10	0.0	0.0	0.0	0.0	0.95	0.0	0.0	0.43	0.0	0.0												
	31	0.0	1.12	0.0	0.0	0.0	0.0	0.43	0.0	0.0	0.32	0.0	0.26												
TOTAL		2.59	3.73	3.58	4.30	2.20	3.64	9.63	1.76	3.33	4.31	1.34	2.29												
STA AV		3.31	3.25	3.15	2.48	3.88	4.75	5.57	4.37	2.85	2.63	1.73	2.92												

NOTES: Precipitation values are Thiessen weighted averages of 2 gages. STA AV based on 6 yr (1965-70) record period.

1970 SELECTED RUNOFF EVENT			AHOSKIE, NORTH CAROLINA WATERSHED W-A1						
ANTECEDENT CONDITIONS			RAINFALL				RUNOFF		
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)
EVENT OF APRIL 13 - 23, 1970									
RG WTD010			RG WTD010						
4-13	0.0	0.0	4-13	2135	0.0	0.0	4-13	1200	0.0
				2140	0.3600	0.03		2200	32.000
				2150	0.1200	0.05		2300	35.500
				2215	0.3360	0.19		2400	51.000
				2230	0.2400	0.25	4-14	200	217.000
				2300	0.3600	0.43		400	515.600
				2310	0.4800	0.51		500	785.000
				2335	0.6240	0.77		600	893.000
				2355	0.5400	0.95		700	947.000
				2400	0.3600	0.98		800	974.000
WATERSHED CONDITIONS: Approximate land use 65% in woodland, 30% in row crops, 2% in pasture, 3% misc. (roads, homesites, and urban areas).			4-14	15	0.5200	1.11		1000	988.000
				100	0.5467	1.52		1200	994.000
				115	0.6000	1.67		1400	996.000
				130	0.4000	1.77		1600	994.000
				150	0.2700	1.86		1800	992.000
				230	0.1800	1.98		2400	986.000
				305	0.2400	2.12	4-15	200	982.000
				330	0.0960	2.16		600	976.000
				400	0.1000	2.21		800	964.000
								1200	931.000
								1400	896.000
								1600	865.000
								1800	814.000
								2200	693.398
								2400	621.398
							4-16	400	479.800
								800	400.000
								1200	348.198
								1600	310.398
								2000	269.800
							4-17	2400	237.300
								600	203.800
								1000	184.600
								1800	158.600
								2400	143.200
							4-18	600	127.800
								1200	117.000
								1800	108.000
								2400	98.100
							4-19	1200	83.790
								2400	74.700
							4-20	600	71.100
								800	70.200
								1000	72.000
								1200	72.000
								2000	72.000
								2400	70.200
							4-21	1200	63.000
								1800	59.000
								2400	57.400
							4-22	600	56.600
								1200	54.200
								2400	50.200
							4-23	1200	47.000
								2400	44.600

NOTES: To convert CPS to IN/HR, multiply by 0.00002719. Precipitation is Thiessen average of 10 rain gages.



EVENT OF APRIL 13 - 23, 1970
ABOSKIE, NORTH CAROLINA WATERSHED W-A1

ABOSKIE, NORTH CAROLINA WATERSHED W-A2

LOCATION: Hertford, Bertie, and Northampton Counties, North Carolina; approximately 5 miles northwest of Aulander; Chowan River Basin.

AREA: 15360.00 acres 24.00 sq. miles

MONTHLY PRECIPITATION AND RUNOFF (inches)														ABOSKIE, NORTH CAROLINA WATERSHED W-A2																			
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual																			
1970	P	2.57	3.75	3.58	4.38	2.40	4.09	8.47	1.78	2.71	4.09	1.53	2.26	41.61																			
	Q	1.390	3.519	1.978	3.040	0.569	0.430	1.658	0.393	0.096	0.247	0.372	0.638	14.329																			
STA AV	P	3.20	3.14	3.23	2.38	3.79	4.69	5.81	4.21	2.78	2.51	1.70	2.80	40.23																			
	Q	1.589	2.252	2.280	1.092	0.907	0.942	1.150	0.984	0.224	0.535	0.198	0.805	12.957																			
ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																																	
		Maximum Discharge				1 Hour				2 Hours				6 Hours				12 Hours				1 Day				2 Days				8 Days			
		Date	Rate	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.						
1970		2- 3	0.040	2- 3	0.040	2- 3	0.080	2- 3	0.230	2- 3	0.420	4-13	0.800	4-13	1.040	1-30	1.520																
MAXIMUMS FOR PERIOD OF RECORD																																	
		10- 5	0.080	10- 5	0.080	10- 5	0.170	10- 5	0.500	10- 5	0.970	10- 5	1.640	10- 4	2.370	10- 3	3.060																
		1964		1964		1964		1964		1964		1964		1964		1964																	

NOTES: Watershed conditions: Woodland, 75%; row crops, 22%; pasture, 2%; roads 6 homesites, 1%. For map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1965, USDA Misc. Pub. 1216, p. 75.1-8. Records of precipitation and runoff began in 1964. STA AV computed on 1965-70 data. Precipitation Thiessen weighted using 5 gages. For temperature information, see table of maximum and minimum values included with data for Watershed 75.001. For long-time precipitation records, see National Weather Service records at Scotland Neck, North Carolina.

1970 DAILY PRECIPITATION (inches)													ABOSKIE, NORTH CAROLINA WATERSHED W-A2												
	Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec												
1	0.12	0.0	0.0	0.32	0.0	0.0	0.0	0.0	0.02	0.0	0.0	0.23	0.0												
2	0.0	0.59	0.08	0.22	0.0	0.0	0.0	0.21	0.0	0.0	0.0	0.03	0.0												
3	0.0	1.43	0.0	0.0	0.01	0.0	0.0	0.0	0.0	0.0	0.0	0.09	0.0												
4	0.0	0.0	0.20	0.0	1.03	0.0	0.0	0.45	0.0	0.11	0.0	0.08	0.0												
5	0.0	0.0	0.0	0.0	0.0	0.0	1.02	0.59	0.0	0.35	0.0	0.04	0.0												
6	0.60	0.0	0.0	0.44	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0												
7	0.12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0												
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0												
9	0.0	0.15	0.0	0.0	0.0	0.0	0.0	0.34	0.04	0.0	0.0	0.0	0.0												
10	0.04	0.04	0.0	0.0	0.0	0.0	0.0	1.03	1.24	0.0	0.0	0.62	0.0												
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.03	0.03	0.09	0.0	0.23	0.0												
12	0.0	0.0	0.16	0.0	0.0	0.0	0.0	0.0	0.0	0.07	0.0	0.04	0.0												
13	0.0	0.0	0.0	0.81	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.01	0.0												
14	0.0	0.0	0.0	1.38	0.0	0.0	0.0	0.29	0.0	0.0	0.0	0.0	0.0												
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.04	0.0												
16	0.0	0.49	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.74	0.03	1.31												
17	0.30	0.68	0.0	0.0	0.07	0.0	0.0	0.12	0.0	0.06	0.0	0.0	0.04												
18	0.28	0.0	0.35	0.0	0.04	0.29	0.0	0.09	0.0	0.0	0.0	0.01	0.0												
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.01	0.0												
20	0.0	0.0	0.32	0.12	0.0	0.0	0.0	1.04	0.0	0.0	0.0	0.07	0.0												
21	0.0	0.0	0.20	0.0	0.0	0.90	0.80	0.0	0.0	0.40	0.0	0.37	0.0												
22	0.0	0.0	0.64	0.0	0.0	0.02	1.20	0.0	0.0	1.23	0.0	0.01	0.0												
23	0.0	0.0	0.0	0.0	0.0	0.07	1.04	0.24	0.0	1.05	0.0	0.36	0.0												
24	0.0	0.0	0.0	0.0	0.0	0.0	0.04	0.0	0.0	0.08	0.0	0.0	0.0												
25	0.0	0.37	0.0	0.0	0.0	0.05	0.10	0.0	0.0	0.0	0.0	0.0	0.0												
26	0.02	0.0	0.46	0.80	1.20	1.69	0.0	0.0	0.0	0.0	0.0	0.0	0.0												
27	0.0	0.0	0.0	0.02	0.0	0.0	0.0	0.0	0.0	1.46	0.0	0.0	0.0												
28	0.0	0.0	0.0	0.27	0.0	0.0	0.0	0.0	0.0	0.62	0.0	0.0	0.0												
29	0.46	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.01	0.0	0.0	0.0												
30	0.63	0.09	0.0	0.0	0.0	0.0	1.18	0.0	0.0	0.26	0.0	0.0	0.0												
31	0.0	1.08	0.0	0.0	0.0	0.0	0.23	0.0	0.0	0.27	0.0	0.17	0.0												
TOTAL		2.57	3.75	3.58	4.38	2.40	4.09	8.47	1.78	2.71	4.09	1.53	2.26												
STA AV		3.20	3.14	3.23	2.38	3.79	4.69	5.81	4.21	2.78	2.51	1.70	2.80												

NOTES: Precipitation values are Thiessen weighted averages of 5 gages. STA AV based on 6 yr (1965-70) record period.

1970 MEAN DAILY DISCHARGE (cfs) AHOSKIE, NORTH CAROLINA WATERSHED W-A2												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	30.00	42.00	22.00	167.00	18.00	3.00	2.60	81.00	1.80	1.90	11.00	3.50
2	28.00	70.00	21.00	166.00	13.00	2.90	3.00	29.00	1.70	1.90	5.50	3.50
3	25.00	508.00	22.00	111.00	10.00	3.10	4.20	13.00	1.60	2.00	3.30	3.50
4	22.00	346.00	19.00	68.00	36.00	3.30	4.70	7.20	1.70	2.20	3.00	3.30
5	19.00	119.00	27.00	49.00	78.00	14.00	15.00	5.40	1.70	2.20	5.10	3.30
6	26.00	82.00	25.00	40.00	43.00	18.00	9.20	4.40	5.50	2.00	4.20	3.00
7	63.00	65.00	19.00	57.00	24.00	11.00	4.50	5.40	2.30	2.00	3.00	3.00
8	46.00	53.00	16.00	41.00	16.00	6.70	3.10	4.10	2.00	2.00	2.80	2.80
9	35.00	50.00	14.00	31.00	11.00	4.90	2.90	3.70	1.70	2.00	2.80	2.80
10	28.00	62.00	12.00	25.00	9.00	4.20	16.00	7.90	1.60	2.00	17.00	2.80
11	23.00	53.00	11.00	19.00	7.90	4.70	36.00	18.00	1.70	1.90	56.00	2.80
12	22.00	43.00	12.00	16.00	6.90	5.20	8.50	10.00	2.20	1.80	28.00	2.80
13	24.00	35.00	13.00	15.00	6.00	5.50	4.40	6.00	1.90	1.60	20.00	2.80
14	22.00	30.00	11.00	492.00	5.50	6.20	4.60	4.20	1.70	1.60	14.00	2.80
15	22.00	27.00	9.60	193.00	4.30	6.40	4.70	3.70	1.70	1.50	11.00	2.80
16	21.00	27.00	8.80	84.00	4.10	6.70	3.30	3.40	1.60	8.00	7.20	21.00
17	21.00	171.00	8.80	55.00	4.70	6.90	2.80	3.70	1.50	2.50	4.50	49.00
18	35.00	114.00	14.00	41.00	5.50	8.30	3.70	3.50	1.40	1.80	4.00	25.00
19	34.00	74.00	24.00	30.00	6.20	7.00	3.90	3.50	1.40	1.80	4.00	17.00
20	28.00	53.00	27.00	26.00	6.40	6.70	20.00	3.00	1.40	1.60	3.50	13.00
21	23.00	40.00	52.00	21.00	5.50	21.00	22.00	3.10	1.40	2.20	4.00	15.00
22	18.00	32.00	166.00	15.00	4.80	11.00	111.00	2.90	1.40	11.00	3.00	24.00
23	17.00	28.00	99.00	13.00	4.10	7.30	274.00	3.00	1.40	74.00	3.30	40.00
24	17.00	24.00	60.00	11.00	3.70	6.50	172.00	4.20	1.40	9.60	2.50	48.00
25	17.00	22.00	42.00	9.60	3.40	10.30	58.00	3.50	1.40	3.30	2.50	32.00
26	20.00	40.00	44.00	12.00	10.00	61.00	24.00	3.30	1.40	2.20	2.50	23.00
27	20.00	33.00	68.00	44.00	6.20	13.00	13.00	3.10	2.20	2.30	2.80	17.00
28	14.00	28.00	46.00	40.00	3.60	6.00	8.80	2.90	8.80	2.20	3.00	14.00
29	13.00		38.00	42.00	3.40	4.20	6.90	2.70	2.50	2.20	3.50	11.00
30	109.00		30.00	28.00	3.40	3.10	40.00	2.40	2.00	2.30	3.30	8.00
31	64.00		295.00		3.40		183.00	2.10		4.00		9.20
MEAN	28.935	81.107	41.168	65.387	11.839	9.250	34.510	8.171	2.067	5.148	8.010	13.281
INCHES	1.390	3.519	1.978	3.040	0.569	0.430	1.658	0.393	0.096	0.247	0.372	0.638
STA AV	1.589	2.252	2.280	1.092	0.907	0.942	1.150	0.984	0.224	0.535	0.198	0.805

NOTES: To convert mean daily discharge in CFS to IN/DAY, multiply by 0.0015496. Runoff data furnished by U.S. Geological Survey. Records are good. STA AV based on 6 yr (1965-70) record period.

1970			SELECTED RUNOFF EVENT										AHOSKIE, NORTH CAROLINA WATERSHED W-A2												
ANTECEDENT CONDITIONS			RAINFALL				RUNOFF																		
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.															
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)															
EVENT OF													APRIL 13 - 18, 1970												
RG WTD005																									
4-13	0.0	0.0	4-13	2135	0.0	0.0	4-13	1200	0.0	0.0															
				2140	0.4800	0.04		2130	11.600	0.0036															
				2215	0.2743	0.20		2200	12.000	0.0040															
				2230	0.0800	0.22		2300	14.200	0.0048															
				2235	0.2400	0.24		2400	26.000	0.0061															
WATERSHED CONDITIONS:																									
Approximate land use 75% in													2300	0.1440	0.30	4-14	30	57.000	0.0074						
woodland; 22% in row crops;													2310	0.3600	0.36		100	125.200	0.0103						
2% in pasture; 1% misc.													2330	0.6900	0.59		130	223.400	0.0159						
(roads and homesites).													2355	0.4560	0.78		200	335.000	0.0249						
				2400	0.3600	0.81		230	378.000	0.0364															
			4-14	5	0.3600	0.84		300	503.898	0.0506															
				15	0.4200	0.91		330	550.698	0.0676															
				50	0.5829	1.25		400	579.300	0.0858															
				115	0.5520	1.48		430	598.803	0.1048															
				140	0.3360	1.62		500	617.000	0.1244															
				200	0.2400	1.70		530	629.600	0.1445															
				220	0.2100	1.77		600	639.398	0.1650															
				300	0.2850	1.96		700	652.500	0.2067															
				400	0.2200	2.16		730	655.500	0.2278															
								800	655.500	0.2490															
								830	653.000	0.2701															
								930	643.600	0.3120															
								1030	631.000	0.3531															
								1130	614.398	0.3933															
								1200	606.600	0.4130															
								1330	576.700	0.4703															
								1500	542.898	0.5245															
								1630	507.800	0.5754															
								1800	472.600	0.6229															
								2100	407.000	0.7081															
								2400	348.000	0.7812															
			4-15	300				299.199		0.8439															
				600				251.500		0.8972															
				900				205.000		0.9414															
				1200				171.100		0.9778															

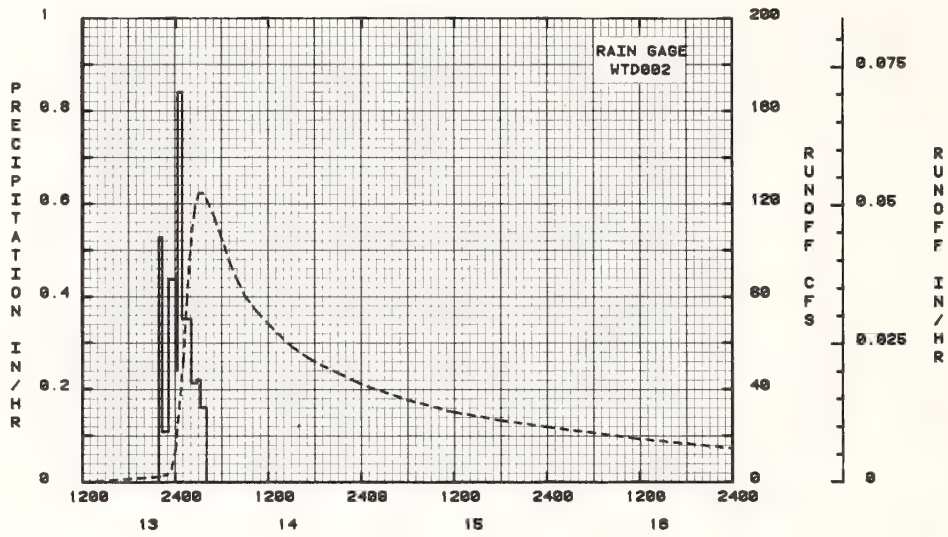
NOTES: To convert CFS to IN/HR, multiply by 0.00006457. Precipitation is Thiessen average of 2 rain gages.

1970 MEAN DAILY DISCHARGE (cfs)												AHOSKIE, NORTH CAROLINA WATERSHED W-A3											
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec											
1	5.500	9.400	3.000	26.000	3.200	0.040	0.020	44.000	0.020	0.020	0.300	0.030											
2	4.800	12.000	3.000	25.000	2.500	0.040	0.020	18.000	0.020	0.020	0.150	0.030											
3	3.900	55.000	3.000	19.000	2.000	0.030	0.020	4.200	0.020	0.020	0.090	0.030											
4	3.000	40.000	3.100	12.000	3.400	0.030	0.100	1.600	0.010	0.020	0.070	0.030											
5	2.500	22.000	4.000	7.700	12.000	0.040	0.500	0.110	0.020	0.020	0.050	0.030											
6	3.000	16.000	3.700	6.100	5.900	0.110	0.250	0.070	0.030	0.020	0.040	0.030											
7	9.400	11.000	3.000	7.000	3.100	0.040	0.100	0.060	0.020	0.020	0.040	0.030											
8	7.700	8.300	2.600	5.400	2.300	0.040	0.030	0.050	0.010	0.030	0.040	0.030											
9	3.700	7.300	2.300	4.200	1.800	0.030	0.040	0.060	0.010	0.030	0.040	0.030											
10	2.500	7.500	2.000	3.100	1.400	0.030	0.030	5.000	1.100	0.010	0.060	0.030											
11	2.000	6.300	1.900	2.700	0.990	0.030	4.500	4.200	0.020	0.030	0.340	0.030											
12	2.200	5.000	2.300	2.300	0.600	0.030	1.000	0.990	0.030	0.030	0.200	0.030											
13	2.500	4.000	2.200	2.300	0.340	0.030	0.120	0.060	0.020	0.030	0.160	0.030											
14	2.400	3.300	1.900	67.000	0.240	0.020	0.300	0.040	0.020	0.030	0.120	0.030											
15	2.300	3.000	1.500	31.000	0.110	0.020	0.150	0.040	0.010	0.030	0.100	0.030											
16	2.100	3.100	1.300	18.000	0.090	0.020	0.080	0.040	0.010	0.100	0.080	0.130											
17	2.290	20.090	1.100	11.000	0.080	0.020	0.040	0.040	0.010	0.050	0.060	0.700											
18	5.400	18.000	1.600	7.700	0.080	0.030	0.150	0.060	0.010	0.040	0.060	0.160											
19	5.400	12.000	2.700	5.500	0.070	0.030	0.500	3.040	0.010	0.040	0.060	0.100											
20	4.200	8.100	3.300	4.400	0.060	0.020	5.500	0.040	0.010	0.040	0.060	0.090											
21	3.000	5.900	6.100	3.200	0.060	0.040	16.000	0.040	0.010	0.040	0.060	0.120											
22	2.000	4.700	19.000	2.500	0.050	0.110	40.000	0.030	0.010	0.120	0.060	0.220											
23	1.500	3.900	15.000	2.200	0.050	0.040	70.000	0.030	0.010	2.400	0.060	0.490											
24	1.400	3.700	8.800	2.000	0.040	0.030	60.000	0.040	0.010	3.240	0.040	0.630											
25	1.500	3.300	6.100	1.500	0.040	0.020	25.000	0.040	0.010	0.100	0.030	0.240											
26	2.500	5.500	5.700	1.900	0.240	3.400	13.000	0.030	0.010	0.070	0.030	0.180											
27	2.800	4.400	10.900	7.200	0.110	0.080	9.000	3.030	0.050	0.060	0.030	0.130											
28	2.500	3.600	6.800	7.200	0.050	0.030	6.000	0.020	0.070	0.060	0.030	0.100											
29	2.700		5.200	8.100	0.040	0.020	4.000	0.040	0.040	0.050	0.030	0.090											
30	14.000		4.200	5.200	0.040	0.020	3.000	0.020	0.020	0.050	0.030	0.070											
31	14.000		34.000		0.040		46.000	0.020		0.120		0.070											
MEAN	4.019	10.929	5.487	10.280	1.323	0.149	10.014	2.423	0.040	0.128	0.084	0.128											
INCHES	1.252	3.076	1.710	3.100	0.412	0.045	3.120	0.755	0.012	0.040	0.025	0.040											
STA AV	1.100	1.748	1.730	0.955	0.790	0.438	0.923	0.723	0.183	0.302	0.030	0.588											

NOTES: To convert mean daily discharge in CFS to IN/DAY, multiply by 0.0100514. Runoff data furnished by U.S. Geological Survey. Records are good to fair. STA AV based on 6 yr (1965-70) record period.

1970 SELECTED RUNOFF EVENT												AHOSKIE, NORTH CAROLINA WATERSHED W-A3											
ANTECEDENT CONDITIONS			RAINFALL			RUNOFF																	
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.		Date	Time	Rate	Acc.								
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)		Mo-Day	of Day	(cfs)	(inches)								
EVENT OF APRIL 13 - 16, 1970																							
RG WTD002			RG WTD002																				
4-13	0.0	0.0	4-13	2150	0.0	0.0	4-13	1200	0.0	0.0													
				2215	0.5280	0.22		2100	2.000	0.0038													
				2305	0.1080	0.31		2200	2.400	0.0047													
				2400	0.4364	0.71		2230	2.900	0.0053													
			4-14	15	0.2400	0.77		2300	3.400	0.0060													
WATERSHED CONDITIONS:				50	0.8400	1.26		2330	5.900	0.0070													
Approximate land use, 88% in				209	0.3514	1.67		2400	13.700	0.0091													
woodland; 10% in row crops;				245	0.2133	1.83		100	52.500	0.0230													
2% misc. (homesites, pasture,				315	0.2200	1.94	4-14	130	81.000	0.0370													
and roads).				400	0.1600	2.06		200	105.000	0.0565													
								230	119.000	0.0800													
								300	124.500	0.1055													
								330	124.500	0.1316													
								400	121.500	0.1574													
								500	114.000	0.2067													
								600	104.500	0.2525													
								700	94.500	0.2942													
								800	87.000	0.3322													
								900	80.000	0.3672													
								1030	73.500	0.4154													
								1200	68.000	0.4598													
								1500	58.300	0.5391													
								1800	51.700	0.6082													
								2100	46.900	0.6701													
								2400	42.100	0.7260													
								4-15	600	35.300	0.8232												
								1200	30.170	0.9054													
								1800	26.500	0.9765													
								2400	23.700	1.0396													
								4-16	1200	18.500	1.1456												
								2400	14.500	1.2285													

NOTES: To convert CFS to IN/HR, multiply by 0.00041881. Precipitation is Thiessen average of 2 rain gages.



EVENT OF APRIL 13 - 16, 1970
 AHOSKIE, NORTH CAROLINA WATERSHED W-A3

SONORA, TEXAS WATERSHED W-7

LOCATION: Sutton County, Texas; 10 mi. NE of Sonora; Lowrey Draw, East Fork Devils River, Devils River, Rio Grande River Basin.

AREA: 12.20 acres

MONTHLY PRECIPITATION AND RUNOFF (inches)										SONORA, TEXAS WATERSHED W-7							
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual			
1970	P	0.24	1.84	1.26	1.54	3.92	2.85	0.0	2.09	2.77	0.82	0.0	0.0	17.33			
	Q	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
STA AV	P	0.69	1.32	1.13	2.43	3.10	1.94	1.44	1.12	2.72	1.72	1.39	0.85	19.88			
	Q	0.0	0.0	0.0	0.025	0.100	0.125	0.0	0.0	0.010	0.0	0.0	0.002	0.262			
ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																	
		Maximum Discharge		1 Hour		2 Hours		Maximum Volume for Selected Time Interval									
		Date	Rate	Date	Vol.	Date	Vol.	6 Hours		12 Hours		1 Day		2 Days		8 Days	
								Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.
1970		0- 0	0.0	0- 0	0.0	0- 0	0.0	0- 0	0.0	0- 0	0.0	0- 0	0.0	0- 0	0.0	0- 0	0.0
MAXIMUMS FOR PERIOD OF RECORD																	
		6- 2	0.910	6- 2	0.570	6- 2	0.660	6- 2	0.660	6- 2	0.660	6- 2	0.730	6- 2	0.730	6- 2	0.730
		1967		1967		1967		1967		1967		1967		1967		1967	

NOTES: Watershed conditions: Rangeland - 100%; range condition - high fair. For map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1967, USDA Misc. Pub. 1262, p. 70.13-6. Precipitation data from rain gage 1. Precipitation and runoff records began January 1965. No runoff occurred during 1970. For long-time precipitation records, see National Weather Service records at the Texas Agricultural Experiment Station, Substation No. 14, 18 miles south of Sonora, Texas.

1970 DAILY PRECIPITATION (inches)													SONORA, TEXAS WATERSHED W-7	
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
1	0.0	0.24	0.0	0.0	0.0	0.12E	0.0	0.0	0.0	0.0	0.0	0.0		
2	0.0	0.0	0.10E	0.0	0.0	0.0	0.0	0.0	0.0	0.09E	0.0	0.0		
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.11E	0.0	0.0	0.0	0.0		
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.17E	0.0	0.0		
6	0.0	0.11E	0.28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
7	0.0	0.0	0.08E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
8	0.0	0.0	0.0	0.0	0.0	0.05E	0.0	0.0	0.0	0.0	0.0	0.0		
9	0.0	0.0	0.0	0.10E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
11	0.0	0.0	0.09E	0.0	0.0	0.0	0.0	0.0	0.0	0.04E	0.0	0.0		
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.10E	0.0	0.0	0.0		
13	0.09E	0.0	0.0	0.0	0.20	0.0	0.0	0.0	0.37	0.0	0.0	0.0		
14	0.0	0.0	0.0	0.0	2.12	0.0	0.0	0.0	0.16	0.0	0.0	0.0		
15	0.05E	0.0	0.0	0.0	0.46	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
16	0.0	0.0	0.16E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
18	0.0 S	0.0	0.0	0.32	0.0	0.0	0.0	0.0	0.0	0.46	0.0	0.0		
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.44	0.0	0.0	0.0	0.0		
20	0.0	0.0	0.48	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
21	0.0	0.0	0.07E	0.0	0.0	1.39	0.0	0.0	0.0	0.0	0.0	0.0		
22	0.05E	0.50	0.0	0.0	0.0	1.26	0.0	1.23	0.40	0.0	0.0	0.0		
23	0.0	0.17	0.0	0.0	0.71	0.0	0.0	0.0	0.0	0.06E	0.0	0.0		
24	0.0	0.74	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.29	0.0	0.0	0.0		
26	0.0	0.0	0.0	0.06E	0.19E	0.0	0.0	0.0	1.34	0.0	0.0	0.0		
27	0.0	0.08E	0.0	0.0	0.13E	0.0	0.0	0.0	0.11E	0.0	0.0	0.0		
28	0.0	0.0	0.0	0.0	0.04E	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
29	0.0	0.0	0.0	0.0	0.0	0.03E	0.0	0.03E	0.0	0.0	0.0	0.0		
30	0.0	0.0	0.0	1.06	0.07E	0.0	0.0	0.24E	0.0	0.0	0.0	0.0		
31	0.05	0.0	0.0	0.0	0.0	0.0	0.0	0.04E	0.0	0.0	0.0	0.0		
TOTAL	0.24	1.84	1.26	1.54	3.92	2.85	0.0	2.09	2.77	0.82	0.0	0.0		
STA AV	0.69	1.32	1.13	2.43	3.10	1.94	1.44	1.12	2.72	1.72	1.39	0.89		

NOTES: For daily air temperatures, in the vicinity, see table for Watershed W-14, p. 70.001. Precipitation data obtained from rain gage 1. Records began January 1965. STA AV based on 6 yr record period. Estimate codes may indicate that non-significant event totals are included.

TREYNOR, IOWA WATERSHED 1

LOCATION: Pottawattamie County, Iowa; approximately 6 miles southwest of Treynor; Silver Creek, West Nishnabotna River, Missouri River Basin.

AREA: 74.50 acres

MONTHLY PRECIPITATION AND RUNOFF (inches)														TREYNOR, IOWA WATERSHED 1															
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual															
1970	P	0.02	0.21	0.32	3.54	3.18	2.36	5.44	5.12	4.52	4.37	1.39	0.53	31.50															
	Q	0.554	0.252	0.214	0.239	0.796	0.197	0.204	1.153	0.141	0.214	0.239	0.173	4.374															
STA AV	P	0.50	0.51	0.92	3.38	4.04	7.04	4.02	4.06	4.55	2.85	0.79	0.86	33.51															
	Q	0.327	0.546	0.541	0.362	0.666	2.535	0.387	0.497	0.594	0.313	0.236	0.225	7.230															
ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																													
		Maximum Discharge Date Rate		1 Hour Date Vol.		2 Hours Date Vol.		Maximum Volume for Selected Time Interval										2 Days Date Vol.		6 Days Date Vol.									
								6 Hours Date Vol.		12 Hours Date Vol.		1 Day Date Vol.																	
1970		8- 2	5.209	8- 2	0.894	8- 2	0.900	8- 3	0.904	8- 2	0.908	8- 2	0.996	8- 1	1.007	7-26	1.073												
MAXIMUMS FOR PERIOD OF RECORD																													
		6-20	5.835	6-20	3.150	6-20	4.160	6-20	4.224	6-20	4.232	6-20	4.246	6-20	4.264	6- 4	5.979												
		1967		1967		1967		1967		1967		1967		1967		1967													

NOTES: Watershed conditions: 95% contoured corn; 5% gullies and grassed waterways. Precipitation from rain gage 117 before April 1 and after November 3; Thiessen average of gages 116, 117, 118 for remainder of year. Precipitation records began January 1, 1964. Runoff records began February 10, 1964. January 1 to February 10, 1964 runoff estimated and included in average. For daily air temperature, in the vicinity, see table for Watershed 3 (71.003). For topographic map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1964, USDA Misc. Pub. 1194, p. 71.1-5. For long-time precipitation records, see National Weather Service records at Omaha, Nebraska.

1970 DAILY PRECIPITATION (inches)														TREYNOR, IOWA WATERSHED 1											
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec													
1	0.0	0.0	0.06	0.0	0.0	0.0	0.0	0.10	0.0	0.0	0.0	0.0	0.0												
2	0.0	0.0	0.17	0.0	0.0	0.0	0.0	3.65	0.42	0.0	0.05	0.0													
3	0.0	0.0	0.16	0.02	0.0	0.0	0.0	0.6	0.0	0.0	0.17	0.0													
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0													
5	0.0	0.0	0.0	0.0	0.04	0.0	0.0	0.0	0.05	0.0	0.0	0.0													
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0													
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.62	0.0	0.0													
8	0.0	0.0	0.0	0.0	0.15	0.0	0.0	0.0	0.0	1.27	0.72	0.0													
9	0.0	0.0	0.04	0.0	0.12	0.0	0.0	0.0	0.18	1.03	0.16	0.0													
10	0.0	0.0	0.0	0.0	0.0	0.12	0.10	0.0	0.0	0.0	0.0	0.48													
11	0.0	0.0	0.0	1.79	0.42	0.72	0.0	0.0	0.0	0.11	0.0	0.0													
12	0.0	0.0	0.0	0.0	1.99	0.05	0.0	0.0	0.0	0.0	0.0	0.0													
13	0.0	0.01	0.0	0.14	0.28	0.0	1.27	0.0	0.24	0.0	0.03	0.0													
14	0.0	0.01	0.0	0.0	0.03	0.0	0.99	0.0	2.16	0.0	0.0	0.0													
15	0.0	0.0	0.0	0.05	0.0	0.54	0.0	0.0	0.41	0.0	0.0	0.0													
16	0.0	0.0	0.0	0.0	0.0	0.47	0.0	0.0	0.21	0.0	0.0	0.05													
17	0.01	0.0	0.0	0.0	0.0	0.33	0.0	0.63	0.25	0.0	0.0	0.0													
18	0.01	0.0	0.05	0.77	0.0	0.0	0.66	0.0	0.0	0.0	0.0	0.0													
19	0.0	0.0	0.30	0.26	0.0	0.03	0.0	0.0	0.0	0.0	0.26	0.0													
20	0.0	0.0	0.0	0.0	0.0	0.05	0.0	0.0	0.0	0.0	0.0	0.0													
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.74	0.0	0.05	0.0	0.0													
22	0.0	0.0	0.0	0.11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0													
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.50	0.81	0.0	0.0	0.0													
24	0.0	0.0	0.0	0.0	0.09	0.0	0.0	0.0	0.0	0.0	0.0	0.0													
25	0.0	0.0	0.04	0.0	0.0	0.05	0.0	0.0	0.10	0.0	0.0	0.0													
26	0.0	0.0	0.0	0.0	0.0	0.0	0.76	0.0	0.0	0.48	0.0	0.0													
27	0.0	0.0	0.0	0.0	0.0	0.0	0.46	0.0	0.0	0.0	0.0	0.0													
28	0.0	0.19	0.0	0.0	0.33	0.0	1.20	0.0	0.0	0.0	0.0	0.0													
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0													
30	0.0	0.0	0.0	0.40	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0													
31	0.0	0.0	0.0	0.03	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0													
TOTAL	0.02	0.21	0.82	3.54	3.18	2.36	5.44	5.12	4.52	4.37	1.39	0.53													
STA AV	0.50	0.51	0.92	3.38	4.04	7.04	4.02	4.06	4.55	2.85	0.79	0.86													

NOTES: Daily precipitation amounts are from rain gage 117 before April 1 and after November 3; Thiessen weighted average values from stations 116, 117, and 118 for remainder of year. STA AV based on 7 yr record period.

AHOSKIE, NORTH CAROLINA WATERSHED W-A4

LOCATION: Bertford County, North Carolina; approximately 2 miles southwest of Ahoskie; Chowan River Basin.

AREA: 1664.00 acres 2.69 sq. miles

MONTHLY PRECIPITATION AND RUNOFF (inches)														AHOSKIE, NORTH CAROLINA WATERSHED W-A4															
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual															
1970	P	3.18	4.61	4.70	5.59	2.82	2.56	11.37	1.73	2.78	3.53	1.49	2.45	46.81															
	Q	0.793	2.412	1.383	2.085	0.418	0.100	0.895	0.122	0.066	0.081	0.078	0.125	8.557															
STA AV	P	3.18	3.45	3.58	2.89	4.04	3.99	6.70	4.89	3.16	2.68	1.53	3.05	43.13															
	Q	0.513	1.434	1.211	0.517	0.440	0.328	0.708	1.225	0.170	0.445	0.075	0.480	7.548															
ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																													
		Maximum Discharge		1 Hour		2 Hours		Maximum Volume for Selected Time Interval																					
		Date	Rate	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.
1970		2- 3	0.130	2- 3	0.130	2- 3	0.260	2- 3	0.680	2- 3	0.980	2- 3	1.150	2- 2	1.380	2- 1	1.770												
MAXIMUMS FOR PERIOD OF RECORD																													
		5-30	0.160	5-30	0.160	5-30	0.320	5-29	0.820	1-13	1.200	1-13	1.660	1-13	2.010	8-21	3.480												
		1966		1966		1966		1966		1968		1968		1968		1967													

NOTES: Watershed conditions: Woodland, 60%; row crops, 39%; homesites, pastures, and roads, 1%. For map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1965, USDA Misc. Pub. 1216, p. 75.1-8. Records of precipitation and runoff began in 1964. STA AV computed on 1965-70 data. Precipitation Thiessen weighted using 2 gages. For temperature information, see table of maximum and minimum values included for Watershed 75.001. For long-time precipitation records, see National Weather Service records at Scotland Neck, North Carolina.

1970 DAILY PRECIPITATION (inches)													AHOSKIE, NORTH CAROLINA WATERSHED W-A4	
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
1	0.22	0.0	0.0	0.27	0.0	0.0	0.0	0.11	0.0	0.0	0.05	0.0		
2	0.0	0.56	0.06	0.53	0.0	0.0	0.63	0.0	0.0	0.0	0.0	0.0		
3	0.0	1.90	0.0	0.0	0.0	0.0	0.12	0.0	2.28	0.0	0.02	0.0		
4	0.0	0.0	0.04	0.0	0.87	0.0	0.32	0.0	0.56	0.0	0.05	0.0		
5	0.0	0.0	0.0	0.0	0.0	0.32	2.02	0.0	0.23	0.0	0.05	0.0		
6	2.75	0.0	0.0	0.44	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
7	0.31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
9	0.0	0.14	0.0	0.0	0.0	0.0	0.54	0.0	0.0	0.0	0.0	0.0		
10	3.02	0.08	0.0	0.0	0.0	0.0	1.15	1.19	0.0	0.0	0.83	0.0		
11	0.0	0.0	0.0	0.0	0.0	0.0	0.02	0.0	0.0	0.0	0.19	0.0		
12	0.0	0.0	0.18	0.0	0.0	0.0	0.0	0.0	0.05	0.0	0.0	0.0		
13	0.0	0.0	0.0	1.02	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
14	0.0	0.0	0.0	1.54	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
16	3.0	0.76	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.83	0.0	1.58		
17	0.32	0.78	0.0	0.0	0.19	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
18	0.24	0.0	0.44	0.0	0.0	0.17	0.0	0.0	0.0	0.0	0.0	0.0		
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.03	0.0		
20	0.0	0.0	0.53	0.11	0.0	0.0	1.55	0.0	0.0	0.0	0.27	0.0		
21	0.0	0.0	0.28	0.0	0.0	0.74	0.54	0.0	0.0	0.57	0.0	0.35		
22	0.0	0.0	0.90	0.0	0.0	0.02	1.93	0.0	0.0	1.51	0.0	0.0		
23	0.0	0.0	0.0	0.0	0.0	0.0	1.32	0.43	0.0	0.22	0.0	0.38		
24	0.0	0.0	0.0	0.0	0.0	0.02	0.0	0.0	0.0	0.0	0.0	0.0		
25	0.0	0.39	0.0	0.0	0.28	0.29	0.0	0.0	0.0	0.0	0.0	0.0		
26	3.10	0.0	0.49	1.62	1.48	1.00	0.0	0.0	0.0	0.0	0.0	0.0		
27	0.0	0.0	0.0	0.02	0.0	0.0	0.0	0.0	1.33	0.0	0.0	0.0		
28	0.0	0.0	0.0	0.04	0.0	0.0	0.0	0.0	0.33	0.0	0.0	0.0		
29	0.58	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
30	0.64	0.09	0.0	0.0	0.0	0.0	1.11	0.0	0.0	0.15	0.0	0.0		
31	0.0		1.69		0.0		0.12	0.0		0.25		0.14		
TOTAL	3.18	4.61	4.70	5.59	2.82	2.56	11.37	1.73	2.78	3.53	1.49	2.45		
STA AV	3.18	3.45	3.58	2.89	4.04	3.99	6.70	4.89	3.16	2.68	1.53	3.05		

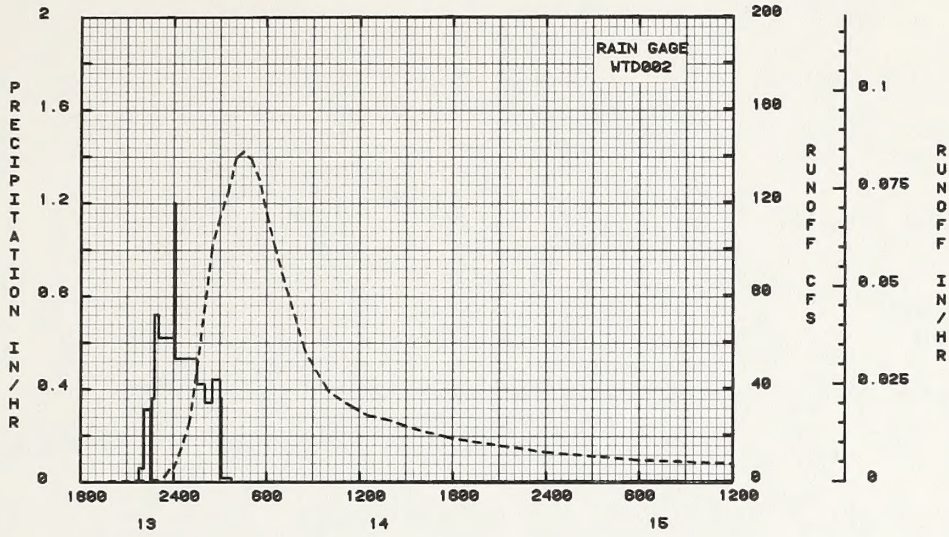
NOTES: Precipitation values are Thiessen weighted averages of 2 gages. STA AV based on 6 yr (1965-70) record period.

1970 MEAN DAILY DISCHARGE (cfs) AHOSKIE, NORTH CAROLINA WATERSHED W-14												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	2.200	2.000	1.200	11.000	0.950	0.180	0.180	1.100	0.160	0.110	0.160	0.130
2	2.000	5.100	1.500	18.000	0.690	0.180	0.280	0.440	0.160	0.160	0.160	0.130
3	1.800	79.000	1.200	7.800	0.580	0.180	0.280	0.350	0.210	0.130	0.160	0.110
4	1.400	15.000	1.000	3.500	5.800	0.180	0.240	0.280	0.280	0.130	0.160	0.110
5	1.000	5.700	1.100	2.200	8.400	0.240	4.800	0.280	0.180	0.130	0.160	0.110
6	2.900	3.600	0.880	2.100	2.600	0.180	0.950	0.240	0.180	0.130	0.160	0.110
7	7.000	2.600	0.820	3.300	1.200	0.180	0.350	0.240	0.160	0.130	0.160	0.110
8	3.500	2.000	0.760	1.900	0.880	0.180	0.280	0.240	0.160	0.130	0.160	0.130
9	1.500	2.000	0.760	1.400	0.640	0.180	0.480	0.240	0.180	0.130	0.160	0.130
10	1.200	2.100	0.760	1.200	0.530	0.160	1.100	0.580	0.180	0.130	0.240	0.130
11	0.820	1.600	0.690	0.950	0.440	0.180	2.000	0.310	0.180	0.130	0.240	0.130
12	0.880	1.200	0.690	0.880	0.350	0.180	0.480	0.240	0.180	0.130	0.210	0.110
13	0.880	0.950	0.760	0.690	0.350	0.180	0.310	0.210	0.160	0.130	0.180	0.110
14	0.760	0.760	0.760	48.000	0.310	0.180	0.240	0.240	0.160	0.130	0.180	0.110
15	0.760	0.690	0.690	7.800	0.310	0.180	0.240	0.240	0.160	0.160	0.180	0.110
16	0.640	1.100	0.580	3.600	0.350	0.180	0.210	0.240	0.160	0.240	0.180	1.000
17	0.690	18.000	0.580	2.200	0.350	0.180	0.210	0.240	0.160	0.130	0.190	0.880
18	3.500	6.600	0.880	1.700	0.350	0.180	0.210	0.240	0.160	0.130	0.240	0.390
19	2.160	3.800	1.400	1.200	0.350	0.180	0.210	0.240	0.160	0.130	0.240	0.280
20	1.500	2.400	2.100	1.400	0.310	0.180	1.400	0.240	0.160	0.130	0.240	0.280
21	1.000	1.700	3.800	1.100	0.280	0.310	1.800	0.240	0.160	0.280	0.210	0.350
22	0.640	1.400	15.000	0.760	0.310	0.210	16.000	0.210	0.160	0.640	0.180	0.350
23	0.530	1.200	5.100	0.690	0.280	0.180	15.000	0.310	0.130	0.690	0.180	0.820
24	0.530	1.060	2.600	0.580	0.280	0.180	4.900	0.210	0.130	0.210	0.160	0.820
25	0.530	1.200	1.700	0.580	0.280	0.390	1.200	0.180	0.130	0.180	0.160	0.480
26	1.000	2.700	2.600	3.300	0.880	1.200	0.580	0.160	0.110	0.160	0.130	0.350
27	0.880	1.800	2.600	10.000	0.350	0.310	0.350	0.160	0.210	0.160	0.130	0.240
28	0.690	1.400	1.600	3.900	0.240	0.210	0.310	0.160	0.090	0.130	0.160	0.210
29	0.690		1.400	2.600	0.210	0.180	0.280	0.160	0.020	0.130	0.180	0.180
30	8.400		1.200	1.400	0.180	0.180	2.600	0.160	0.010	0.160	0.160	0.160
31	3.500		40.000		0.180		5.100	0.160		0.160		0.180
MEAN	1.7860	6.0210	3.1200	4.8580	0.9420	0.2340	2.0180	0.2750	0.1550	0.1820	0.1810	0.2820
INCHES	0.793	2.412	1.383	2.085	0.416	0.100	0.895	0.122	0.066	0.081	0.078	0.125
STA AV	0.513	1.434	1.211	0.517	0.440	0.328	0.708	1.225	0.170	0.445	0.075	0.480

NOTES: To convert mean daily discharge in CFS to IN/DAY, multiply by 0.0143039. Runoff data furnished by U.S. Geological Survey. Records are good. STA AV based on 6 yr (1965-70) record period.

1970	SELECTED RUNOFF EVENT			AHOSKIE, NORTH CAROLINA WATERSHED W-14						
ANTECEDENT CONDITIONS			RAINFALL				RUNOFF			
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)
EVENT OF APRIL 13 - 15, 1970										
4-13	RG WTD002 0.0	0.0	4-13	RG WTD002			4-13	1800	0.0	0.0
				2145	0.0	0.0		2230	0.700	0.0009
				2205	0.0600	0.02		2300	0.800	0.0011
				2230	0.3120	0.15		2330	2.700	0.0016
				2235	0.0	0.15		2345	5.500	0.0022
				2245	0.3690	0.21				
WATERSHED CONDITIONS: Approximate land use, 60% in woodland, 39% in row crops; 1% misc. (homesites, pastures, and roads).				2300	0.7200	0.39		2400	5.800	0.0030
				2400	0.6200	1.01	4-14	30	14.500	0.0060
				5	1.2000	1.11		100	25.000	0.0119
				130	0.5294	1.86		130	49.100	0.0229
				200	0.4200	2.07		200	76.000	0.0415
				230	0.3400	2.24		230	102.000	0.0680
				300	0.4430	2.46		300	114.400	0.1002
				305	0.3600	2.49		330	124.800	0.1358
				345	0.0150	2.50		400	139.200	0.1751
								430	142.000	0.2170
								500	138.400	0.2588
								530	130.000	0.2988
								600	114.800	0.3353
								630	101.200	0.3675
							700	88.800	0.3958	
							830	55.600	0.4603	
							1000	38.600	0.5024	
							1130	32.000	0.5340	
							1230	28.400	0.5520	
							1300	27.700	0.5604	
							1400	26.200	0.5765	
							1500	23.500	0.5913	
							1800	18.400	0.6288	
							2400	12.400	0.6839	
							600	9.000	0.7222	
							1200	7.400	0.7515	
							1800	6.000	0.7755	
							2400	5.000	0.7952	

NOTES: To convert CFS to IN/HR, multiply by 0.00059599. Precipitation is Thiessen average of 2 rain gages.



EVENT OF APRIL 13 - 15, 1970
AHOSKIE, NORTH CAROLINA WATERSHED W-A4



